

00054893
(DIR90BT)

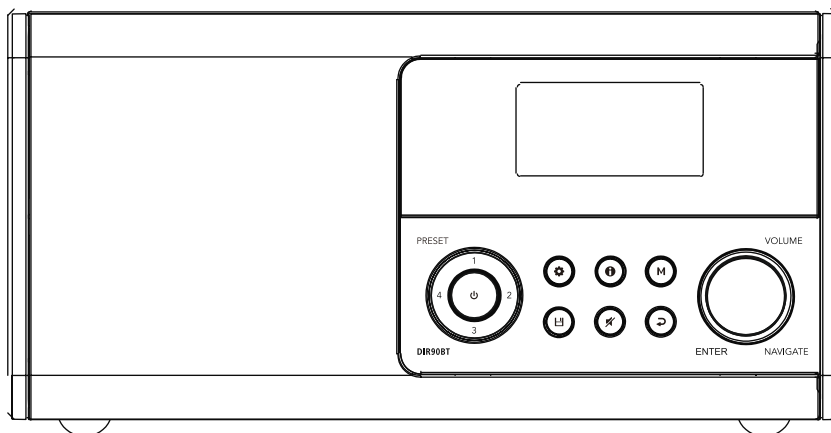
hama®

THE SMART SOLUTION



Digital Radio

Digital-Radio

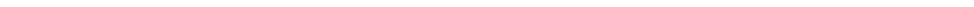


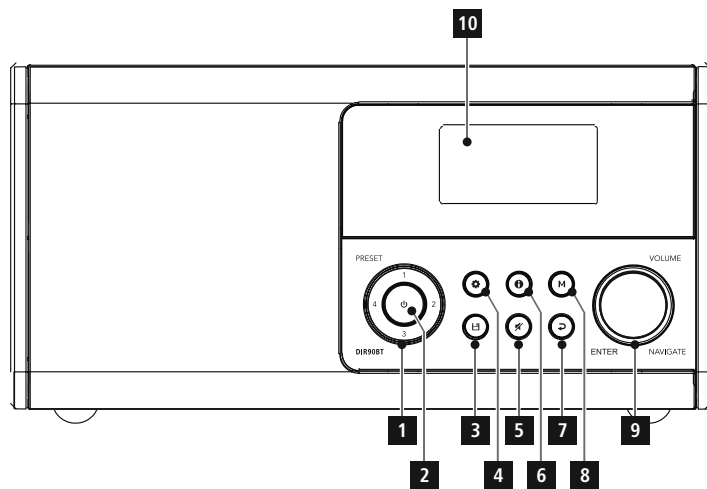
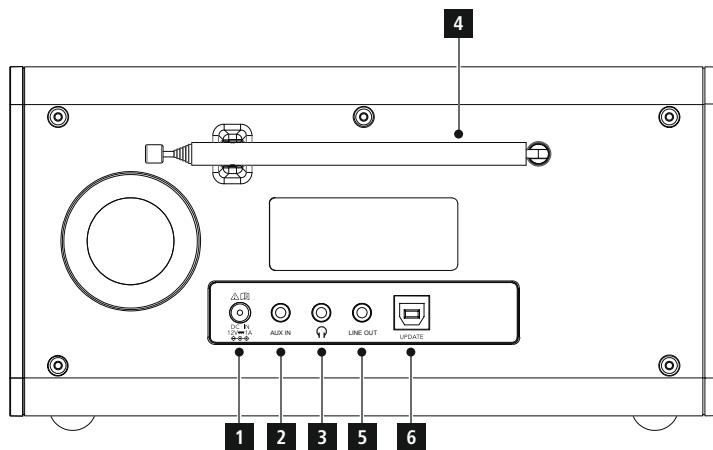
Operating Instructions / Bedienungsanleitung / Mode d'emploi / Instrucciones de uso /
Руководство по эксплуатации / Istruzioni per l'uso / Gebruiksaanwijzing / Οδηγίες χρήσης / Instrukcja obsługi /
Használati útmutató / Návod k použití / Návod na použitie / Manual de instruções / Kullanma kılavuzu /
Manual de utilizare / Bruksanvisning / Käyttöohje / Работна инструкция / Betjeningsvejledning / Manuelt stasjonssøk

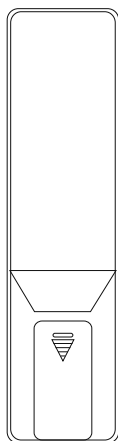
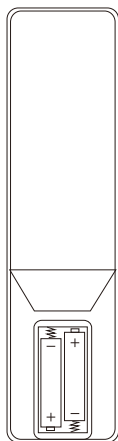
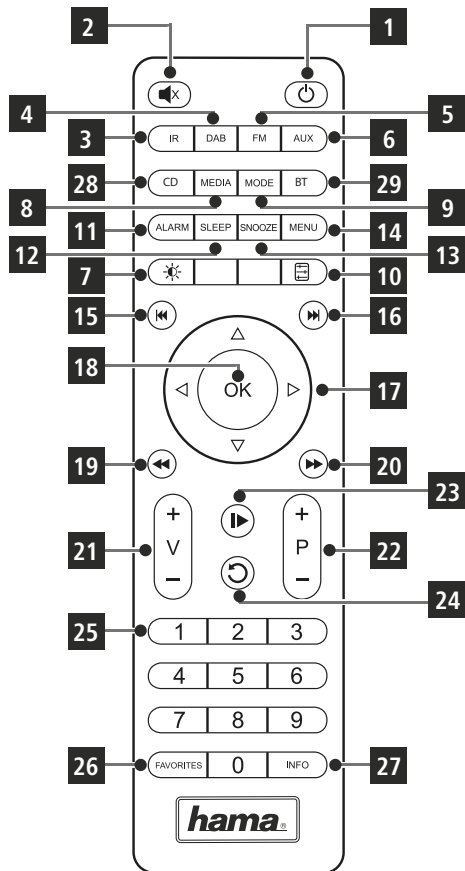
Technical data							
Digital Radio	FM ✓	DAB ✓	DAB+ ✓	Bluetooth ✓	Podcasts ✓	Internet ✓	Spotify ✓
Bluetooth	WiFi 2.4GHz (b/g/n) / 5GHz (a/n), Bluetooth Standard (4.2)						
Display	2.4" (6.0 cm) Liquid Crystal Display (LCD)						
Encryption	WEP, WPA, WPA2, WPS						
Current input	12 V $\overline{=}$ 1.0 A						
Frequency range	DAB/DAB+ 174.928 – 239.200 MHz			FM 87.5 – 108 MHz			
Connections	Mains supply, AUX In, headphones output 3.5 mm, Line Out, update port						
Favourites	DAB/DAB+: 20		FM: 20	IR: 20	Spotify: 10	Podcasts: 20	
UI languages	German, English						
Packaging contents	Digital radio, mains cable, operating instructions, remote control, battery						

Spotify Connect







Use your phone, tablet or computer as a remote control for Spotify.
Go to spotify.com/connect to learn how











A**B**






Controls and displays

A: Front		
1		Presets 1-4
2		[POWER] button
3		[MEMORY] button
4		[MENU/SETTINGS] button
5		[MUTE] button
6		[INFO] button
7		[BACK] button
8	M	[MODE] button
9		[NAVIGATE/ENTER/ VOLUME] button
10		Display

B: Reverse		
1	<i>DC IN</i>	Mains power supply
2		AUX IN
3		Headphone socket
4		Telescopic aerial
5		LINE OUT socket
6		Update port

C: Remote control		
1	[]	On/off switch Press \triangle [volume +/-] / []
2	[]	Mute
3	[IR]	Direct access to Internet Radio mode \triangle [mode]
4	[DAB]	Direct access to DAB mode \triangle [mode]
5	[FM]	Direct access to FM mode \triangle [mode]
6	[AUX]	Direct access to Aux in mode \triangle [mode]
7	[]	Backlight settings
8	[MEDIA]	Direct access to MEDIA \triangle [mode]
9	[MODE]	Change operating mode (Internet Radio, DAB, FM, Spotify Connect, Podcasts, Aux in) \triangle [mode]
10	[]	Equaliser settings
11	[ALARM]	Direct access to alarm clock settings \triangle [alarm]
12	[SLEEP]	Snooze settings
13	[SNOOZE]	Activating Snooze
14	[MENU]	Direct access to the menu \triangle [menu]
15	[]	Previous track (mode: Spotify Connect, Podcasts, BT)
16	[]	Next track (mode: Spotify Connect, Podcasts, BT)

17	Navigation buttons	\blacktriangle Up / \blacktriangledown Down / \triangleleft Back one menu level \triangle [back] / \blacktriangleright Forward / Confirm \triangle Press [enter/navigate]/[OK]
18	[OK]	Confirm \triangle Press [enter/navigate]
19	[]	Rewind (mode: Spotify Connect, Podcasts)
20	[]	Fast forward (mode: Spotify Connect, Podcasts)
21	Volume buttons [+]/[-]	Volume control \triangle Turn [volume +/-] / []
22	Favourites buttons [+]/[-]	Selection from favourites list
23	[]	Start / Stop playback (mode: Spotify Connect, Podcasts, BT, Aux in)
24	[]	Back one menu level \triangle [back]
25	Number buttons	Direct access to / save favourites
26	[FAVORITES]	List / save favourites
27	[INFO]	Display additional information \triangle [info]
28		CD playback mode
29		BT playback mode



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Menu structure

Main menu*

Internet Radio	Station list	Local Germany
		Last listened
		Search Stations
		Location
		Popular stations
		New Stations
	Main menu*	
	System settings**	
Podcasts	Podcast List	
	Main menu*	
	System settings**	
Spotify Connect	Main menu*	
	System settings**	
DAB	Station list	
	Scan	
	Prune invalid	
	DRC	
	Station order	
	Main menu*	
	System settings**	
FM	Scan setting	
	Audio setting	
	Main menu*	
	System settings**	
Bluetooth	Bluetooth connect	
	Show details	
	Main menu*	
	System settings**	
AUX In	Main menu*	
	System settings**	
Sleep		
Alarm	Alarm 1	
	Alarm 2	
System settings**		

System settings**

Equaliser
Network
Time/Date
Language
Factory Reset
Software update
Setup wizard
Info
Privacy
Backlight
Auto-Standby



Thank you for choosing a Hama product. Take your time and read the following instructions and information completely. Please keep these instructions in a safe place for future reference. If you sell the device, please pass these operating instructions on to the new owner.

1. Explanation of warning symbols and notes

Risk of electric shock



This symbol indicates a risk of electric shock from touching product parts carrying hazardous voltage.

Warning



This symbol is used to indicate safety instructions or to draw your attention to specific hazards and risks.

Note



This symbol is used to indicate additional information or important notes.

2. Package contents

- DIR90BT digital radio
- Power supply unit
- Remote control
- 2 x AAA batteries
- These operating instructions

3. Safety instructions

- The product is intended for private, non-commercial use only.
- Do not use the product in the immediate vicinity of heaters, other heat sources or in direct sunlight.
- Use the item only in moderate climatic conditions.
- Use the product only for the intended purpose.
- Do not use the product in a damp environment and avoid splashing water.
- Be considerate. High volumes can disturb or interfere with your surroundings.
- Protect the product from dirt, moisture and overheating and use it in dry rooms only.
- As with all electrical products, this device should be kept out of the reach of children.
- Children must not play with the device. Cleaning and user maintenance must not be carried out by children without supervision.
- Do not use the product in areas in which electronic products are not permitted.
- Be considerate. High volumes can disturb or interfere with your surroundings.
- Do not drop the product and do not expose it to any major shocks.
- Do not operate the product outside the power limits specified in the technical data.
- Keep the packaging material out of the reach of children due to the risk of suffocation.
- Dispose of packaging material immediately in accordance with the locally applicable regulations.
- Do not modify the device in any way. Doing so voids the warranty.

Risk of electric shock



- Do not open the device or continue to operate it if it becomes damaged.
- Do not use the product if the AC adapter, adapter cable or power cable is damaged.
- Do not attempt to service or repair the product yourself. Leave any and all service work to qualified experts.



Warning – Batteries



- When inserting batteries, note the correct polarity (+ and - markings) and insert the batteries accordingly. Failure to do so could result in the batteries leaking or exploding.
- Only use batteries (or rechargeable batteries) that match the specified type.
- Before you insert the batteries, clean the battery contacts and the polar contacts.
- Do not allow children to change batteries without supervision.
- Do not mix old and new batteries, or batteries of different types or from different manufacturers.
- Remove the batteries from products that are not being used for an extended period (unless these are being kept ready for an emergency).
- Do not short-circuit batteries.
- Do not charge batteries.
- Do not burn batteries.
- Keep batteries out of the reach of children.
- Never open, damage or swallow batteries or allow them to enter the environment. They can contain toxic, environmentally harmful heavy metals.
- Remove spent batteries from the product and dispose of them without delay.
- Do not store, charge or use the device in extreme temperatures.

4. Informations and notes before getting started

Note



A detailed description of the UNDOK app and all of its functions can be found in our UNDOK guide at:



www.hama.com -> 00054893 -> Downloads

Note



- For best reception, ensure that the antenna is fully extended and vertical.
- Try various different positions if necessary to get the best reception.

Network connection / Preparing the Internet connection

You can integrate this radio into a network. To receive Internet radio, an Internet connection is required on this the network.

WLAN connection (wireless network)

- Ensure the router is switched on, is functioning correctly and that there is a connection to the internet/network.
- Activate the WLAN function of your router if it is not already activated.
- Follow your router's operating instructions as regards the correct functioning of the WLAN connection.

Note



Use only original accessories (or accessories approved by Hama) to avoid damage to the product.

5. Getting started

Warning



- Only operate the product from a socket that has been approved for the device. The socket must be installed close to the product and must be easily accessible.
- Disconnect the product from the power supply using the On/Off switch – if this is not available, unplug the power cord from the socket.
- If using a multi-socket power strip, make sure that the total power consumption of all connected devices does not exceed the power strip's maximum throughput rating.
- If you will not be using the product for a prolonged period, disconnect it from mains power.

5.1 Remote control

- Open the battery compartment cover located on the rear of the remote control.
- Insert the batteries provided, making sure you match the polarities correctly. The correct polarity is indicated by the plus and minus symbols in the battery compartment.



5.2 Radio – Connecting and starting up

Connect the power supply to the mains connection (1) on the back of the radio.

Connect the network cable to a properly installed and easily accessible network socket. The power supply unit is suitable for mains voltages between 100 and 240 V, and is thus operable on almost any AC power grid. Please note that a country-specific adapter may be necessary. You can find an appropriate selection of Hama products at www.hama.com.

Once the product has been connected to mains power, initialisation takes place. The radio starts up.

To assist you with the first-time setup of the radio, a **Setup Wizard** is provided.

5.3 General notes on use

Notes on use



- These operating instructions always relate to operation using the controls on the device. Functions that are only usable by **app** or remote control are explained separately.
- For information on the buttons on the remote control and their functions (▲) that correspond to the control buttons on the device, please see the **Controls and displays**.
- **[OK]** and the navigation button ► on the remote control correspond to pressing **[NAVIGATE/ENTER/VOLUME]**.
- The navigation button ◀ on the remote control corresponds to **[back]** on the front of the radio.
- The navigation buttons ▲/▼ correspond to turning **[NAVIGATE/ENTER/VOLUME]** to the left and right on the front of the radio.
- When a selection among menu items is to be made (such as **YES** or **NO**), the one currently selected has a light-coloured background fill.
- In menus offering a variety of different options (such as Equalizer, Update, and so on), the currently selected option is marked with #.

Navigation and controls

- Select among menu items by turning **[NAVIGATE/ENTER/VOLUME]**.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- After pressing a shortcut button, navigate amongst the menu items using **[NAVIGATE/ENTER/VOLUME]**.

Volume adjustment / mute

- You can turn the volume up (right) or down (left) by turning **[NAVIGATE/ENTER/VOLUME]** (9) accordingly.
- Press **[MUTE]** (5) to mute the radio.
- Press **[MUTE]** (5) again to reset the volume to the value it was prior to the radio being muted.

Entering passwords, search terms, and so on.

- Select each successive letter and digit by turning **[NAVIGATE/ENTER/VOLUME]** and confirm each selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- To make corrections, select **[BKSP / <-]** and confirm. The last input made is deleted.
- To cancel input, select **[CANCEL]** and confirm.
- Once your input is complete, select **[OK]** and confirm to finish.

Additional information

Depending on the operating mode and stations available, pressing **[i]** (6) displays additional information:

- **Description**
Indicates the radio station, the current programme, contents, subjects, etc.
- **Genre**
The genre (music style) of the station is shown.
- **Reliability / signal strength**
- **Bit rate**
The currently received digital bit rate of the received station is displayed.
- **Channel information**
- **Current time**
- **Today's date**

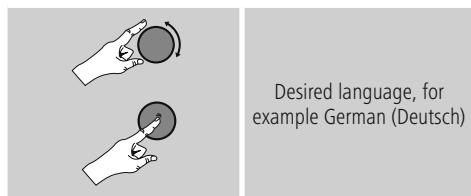
Switch On/Off / Standby

- Press **[POWER]** (2), to switch the device on or off (Standby).
- To completely switch off the device, disconnect it from the power supply.



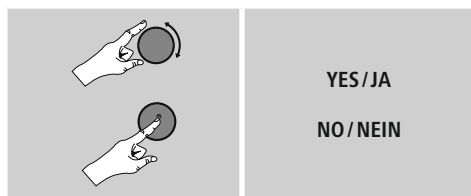
5.4 Initial setup

When it is first connected to the power supply, a list of available languages for the menu is displayed. Proceed as follows to set your desired language:



Setup wizard

Once a language has been set, the first-time setup can be carried out via the setup wizard (**YES**)/ or skipped (**NO**):



Note – Starting up with or without the setup wizard



- We recommend using the setup wizard (**YES**) for quick and easy first-time setup (setting of the time, date, internet connection, etc.).
- If you wish to skip setup with the setup wizard anyway, choose **NO**. All of the settings configured by the setup wizard can be configured or changed individually in the **System settings** menu. Alternatively, you may restart the setup wizard at any time.
- Next, choose **YES** or **NO** to define whether or not the setup wizard should start automatically next time the radio is started up. You are in the **main menu**.

Date / Time /

12/24-hour format

• Auto update

• Update from DAB/ FM

If automatic time and date adjustment is activated, the device receives time and date information from the station over the FM/DAB/DAB+ radio network. This is the best way to ensure that the clock will run accurately and the alarm will trigger at the correct time, even after power outages.

• Update from Internet

Choose this option to set the time and date automatically via the Internet connection. Also set the time zone of your current location and, if desired, turn (**ON**) automatic adjustment between summer time and winter time.

• No update

The time and date (**DD-MM-YYYY**) must be set manually; no automatic calibration takes place.

Network wizard – Configuration of network connection

Note – Reference to a different part of these operating instructions



Because this chapter is extensive, please follow the directions in section **17.2.1 Network wizard – Configuration of Internet connection / Search**.

Once the network wizard has finished, the setup wizard is finished as well. The display shows a message to this effect. Confirm that you have finished by pressing [**NAVIGATE/ ENTER/VOLUME**] to return to the **main menu**.



6. Main menu / modes

This device supports radio reception via the Internet, DAB/DAB+ and FM.

The main menu contains the various operating modes as well as other options that are explained separately in the following chapters:

7. Internet Radio

8. Podcasts

9. Spotify Connect

10. DAB / DAB+

11. FM

12. Bluetooth

13. AUX

14. System settings

Select amongst the available operating modes by repeatedly pressing **[M]** (8).

During playback, the current operating mode appears at the top left-hand edge of the screen.

7. Internet Radio

Note



If necessary, it is possible to switch providers in order to make all features and functions of the product available.

From the main menu or after pressing **[M]** repeatedly, activate Internet (**Internet Radio**) mode on the radio.

Alternatively, press **[IR]** on the remote control to switch directly to this operating mode.

7.1 Station search

This radio offers various ways to search for stations.

- Use **[NAVIGATE/ENTER/VOLUME]** to navigate through each search function and its options.
- Once you have found a station you like, confirm by pressing **[NAVIGATE/ENTER/VOLUME]**. The radio starts playing the selected station.

7.1.1 Search by country or region

To search for a station by continent, country and region, proceed as follows:

- Press **[⚙]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "List of stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Countries" menu item. Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.

Once you have restricted the results to a certain country or region, select a station from the complete list or from a list sorted by genre.

7.1.2 Search by genre

To search for a station of a certain genre or subject focus, proceed as follows:

- Press **[⚙]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "List of stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Discover" menu item. Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.

Once you have restricted the results to a certain genre, select a station from a list of all stations available, or from a pre-selected list, or from a list sorted by country.

7.1.3 Search by name

If you know the name of the desired station, you can search for it directly:


- Press **[⚙]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "List of stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Search" menu item. Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.

Enter the complete name, or a part thereof, in the input screen and select **[OK]** to start the search. You receive a list of all available stations whose names contain the search key.




7.1.4 Popular stations

You can find a selection of the most popular stations as follows:

- Press  (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "List of stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Popular" menu item and select your preferred station.

7.1.5 Local stations

To search for stations from your own country (the country in which the radio is currently located), proceed as follows:

- Press  (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "List of stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Local <Country>" menu item. Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to your preferred station.

Note

Replace the <Country> placeholder with the country you are currently located in.



You can filter this local list by genre, or select a station from the complete list, or select from a pre-selected list.

7.2 Favourites (local)

You can save up to 20 of your favourite stations for quick and direct access.

7.2.1 Assigning the Presets shortcut buttons

- Set the station that you would like to save as a station preset.
- Once the station is playing, press and hold the relevant shortcut button for around 3 seconds.
- The selection will be confirmed by the display showing "Program (1-4, depending on the shortcut button) saved".
- During playback, the Preset memory slot is displayed at the bottom edge of the screen.

Note


Favourites cannot be deleted. If all 20 station memory slots are filled and you wish to save a new station, choose one of the occupied slots. The station in this slot will be overwritten with the new station.




7.2.2 Calling up shortcut button presets

To call up a preset station, press the corresponding shortcut button **(2-5)**.

7.2.3 Assigning the list of presets (1-20)

- Set the station that you would like to save as a station preset.
- If the stations is playing, press and hold  (3) for approx. 3 seconds until the Presets list opens up.
- Navigate to the preferred memory slot and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]** (9).
- The selection will be confirmed by the display showing "Program (1-20, depending on the memory slot) saved".

7.2.4 Calling up a station from the Presets list (1-20)

- Press  to call up the Presets list.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the preferred station and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]**.



7.3 Favourites

(airable - <http://www.wifiradio-frontier.com>)

In addition to the local favourite memory slots, you can also create your own lists of favourites.

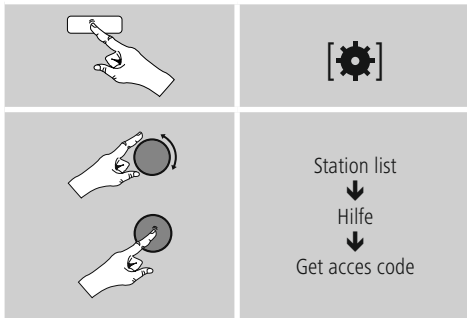
7.3.1 First use – Registering your radio

In order to be able to use this function you have to register at www.wifiradio-frontier.com. You need a valid email address and an access code which will be generated by your radio.

Note

- No personal information is collected during the registration process.
- Registering does not cost you anything extra. The offer is completely free.
- Following registration you can choose from around 20,000 radio stations and 10,000 podcasts.

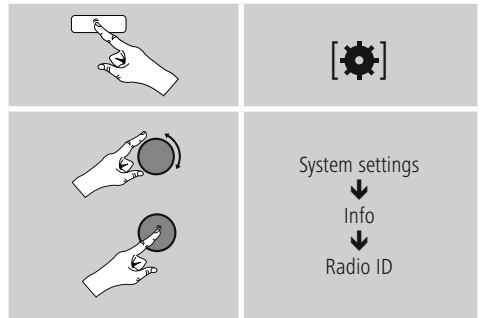
Get access code:



Note

Please note that each access code can only be used once. Please contact customer service if you should experience problems while registering the radio.

- During registration, the radio's ID is associated with your e-mail address and saved in the web interface.
- If multiple radios are registered to you and you wish to delete one of those registrations or just compare them, you can find the radio's ID as follows.



7.3.2 Managing favourites online

(airable - <http://www.wifiradio-frontier.com>)

After registering on the portal, you can search through the station archive using various filters, try out stations, and create your own favourites list from the stations listed there. The favourites list is then synchronised with your radio in a matter of seconds.

7.3.3 Opening the favourites list

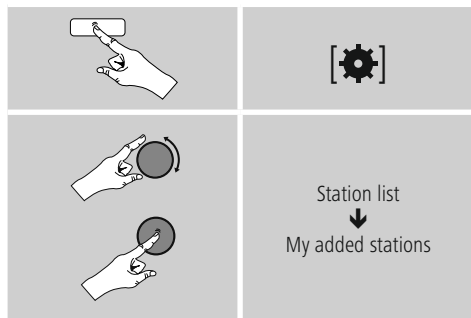
To open the favourites list you created on the portal using the radio, proceed as follows:



7.3.4 My Added Stations

If a station you desire is not yet available, you can add it manually to the portal, or suggest a station be added to the database (Recommend station).

- You need the web address of the stream, which can often be found on the station's website.
- You can access the added radio stations as follows:



The database is constantly expanded and maintained. Nevertheless, we hope you'll understand that sometimes there can be delays in integrating new stations and some stations are even rejected.

8. Podcasts

Podcasts are programs on various topics and include, for example, talk shows, news and much more. Podcasts can be downloaded from the Internet. There are normally approximately 10,000 programs available. Similarly to radio stations, the radio makes it possible to filter a large number of Podcasts, or to search the entire database for a matching result.

From the main menu or after pressing [M] repeatedly, activate **Podcasts** mode on the radio:

8.1 Podcast search

8.1.1 Search by country or region

To search for a podcast by continent, country and region, proceed as follows:

- Press [⚙] (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Podcast list" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Countries" menu item and select your preferred station.

Once you have restricted the results to a certain country or region, select a station from the complete list or from a list sorted by genre.

8.1.2 Search by format (subjects or categories)

To search for a podcast by continent, country and region, proceed as follows:

- Press [⚙] (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Podcast list" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Discover" menu item and select your preferred station.

8.1.3 Search by name

If you know the name of the desired Podcasts, you can search for it directly:

- Press [⚙] (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Podcast list" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Search" menu item.

Enter the complete podcast name, or a part thereof, in the input screen and select [OK] to start the search. You receive a list of all available Podcasts whose names contain the search key.

8.2 Favourites (local)

You can save up to 20 of your favourite stations for quick and direct access.

8.2.1 Assigning the Presets shortcut buttons

- Set the station that you would like to save as a station preset.
- Once the station is playing, press and hold the relevant shortcut button for around 3 seconds.
- The selection will be confirmed by the display showing "Program (1-4, depending on the shortcut button) saved".
- During playback, the Preset memory slot is displayed at the bottom edge of the screen.

Note



Favourites cannot be deleted. If all 20 station memory slots are filled and you wish to save a new station, choose one of the occupied slots. The station in this slot will be overwritten with the new station.

8.2.2 Calling up shortcut button presets

To call up a preset station, press the corresponding shortcut button (2-5).



8.2.3 Assigning the list of presets (1-20)

- Set the station that you would like to save as a station preset.
- If the stations is playing, press and hold [H] (3) for approx. 3 seconds until the Presets list opens up.
- Navigate to the preferred memory slot and confirm your selection by pressing [NAVIGATE/ENTER/VOLUME] (9).
- The selection will be confirmed by the display showing "Program (1-20, depending on the memory slot) saved".

8.2.4 Calling up a station from the Presets list (1-20)

- Press [H] to call up the Presets list.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the preferred station and confirm your selection by pressing [NAVIGATE/ENTER/VOLUME].



9. Spotify

Spotify Connect gives you access to millions of songs. You can listen to them on your radio, on the go using your smartphone, or at your PC.

Requirements:

- You must have the Spotify app installed on your Android or iOS device.
- It can be downloaded from the Play Store or the Apple App Store. Once the app is installed, start it and log into your account (or, if you do not have an account, register a new one).
- You will require a Spotify account (see www.spotify.de for more information).
- The radio must be on the same network as the Android or iOS device with the Spotify app installed.

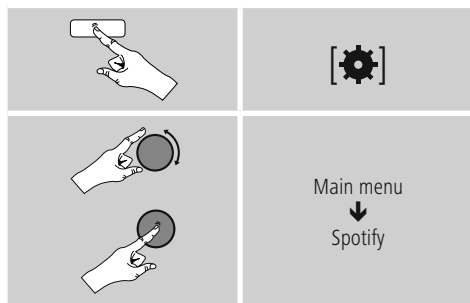
Use:

- In the Spotify app, start playback of a playlist or track as usual.
- The usual playback information is displayed, such as the album cover, track, etc.
- At the bottom edge of the screen, the Spotify Connect logo  is shown next to **Available devices**.
- Choose  **Available devices** to access an overview of all devices available on the network.
- Select the radio. The audio is now played back on the radio.

Once the connection has been established, the Spotify Connect logo  and the device designation are displayed in green.

After successful initial connection:

From the main menu or after pressing [M]/[MODE] repeatedly, activate **Spotify (Spotify Connect)** mode on the radio:



- Press [ENTER/NAVIGATE] (or [▶] on the remote control) to start playback.
- Alternatively, you can control the radio - e.g. skip to a different track or adjust the volume - using the remote control, the Smart Radio app, or the Spotify app.

10. Digital radio (DAB/DAB+)

The radio receives all established digital radio frequencies in the range of 174 MHz to 240 MHz (band III, channel 5A to 13F). From the main menu or after pressing [M] repeatedly, activate operating mode **DAB (DAB Radio)** on the radio.


Alternatively, press [DAB] on the remote control to switch directly to this operating mode.

10.1 Search / Automatic search

The automatic DAB channel search scans the DAB band III for available stations. After the station search, all interference-free stations are saved in alphabetical order. In Stations list a? is displayed in front of the station names of stations found during a previous scan but which cannot currently be received.

The automatic DAB station search starts automatically when DAB mode is started for the first time; it is indicated by **Scanning...** and a status bar on the display.

If you would like to start the search again, proceed as follows:

- Press  (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Full scan" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Wait until the search process has completed.
- The available stations are now displayed in the list of stations.



10.2 Station list

You can call up the station list in DAB mode at any time. To do this, proceed as follows:

- Press **[↔]** (7) during playback to navigate through the available stations in ascending alphabetical order using **[NAVIGATE/ENTER/VOLUME]**.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- The device starts playback automatically.

Note

The list of stations contains all stations that were found on the last station search. A further station search - as described in **10.1 Search / Automatic search** - can be started. A station's reception quality depends on factors such as the weather, location and orientation of the aerial. If a station shown in the list of stations is not available, changing the orientation of the aerial or the location of the radio may help. Stations that are not available can be removed from the list of stations as described in **10.3 Edit station list**.

10.3 Edit station list

To remove stations that are not currently in the reception area, from your station list, proceed as follows:

- Press **[⚙]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Delete inactive stations" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.

If you answer **YES**, then all currently unavailable stations will be removed from the station list.

Note

To keep the list of stations up to date, we recommend updating the list regularly with a full station search (see **10.1 Search / Automatic search**).

10.4 Favourites (local)

You can save up to 20 of your favourite stations for quick and direct access.

10.4.1 Assigning the Presets shortcut buttons

- Set the station that you would like to save as a station preset.
- Once the station is playing, press and hold the relevant shortcut button for around 3 seconds.
- The selection will be confirmed by the display showing "Program (1-4, depending on the shortcut button) saved".
- During playback, the Preset memory slot is displayed at the bottom edge of the screen.

Note

Favourites cannot be deleted. If all 20 station memory slots are filled and you wish to save a new station, choose one of the occupied slots. The station in this slot will be overwritten with the new station.

10.4.2 Calling up shortcut button presets

To call up a preset station, press the corresponding shortcut button **(2-5)**.

10.4.3 Assigning the list of presets (1-20)

- Set the station that you would like to save as a station preset.
- If the stations is playing, press and hold **[⏸]** (3) for approx. 3 seconds until the Presets list opens up.
- Navigate to the preferred memory slot and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]** (9).
- The selection will be confirmed by the display showing "Program (1-20, depending on the memory slot) saved".

10.4.4 Calling up a station from the Presets list (1-20)

- Press **[⏸]** to call up the Presets list.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the preferred station and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]**.



10.5 DRC (Dynamic Range Control)

Some DAB network radio stations support a volume control feature that actively takes effect during playback. If the volume suddenly increases, DRC automatically lowers it. If the volume suddenly becomes quieter, DRC automatically raises it. The same happens when playback is suddenly quiet. The radio then increases the volume again.

DRC high: total equalisation of different volumes. Strong compression can audibly reduce the dynamics of a music title.

DRC low: partial equalisation of different volumes. More subtle compression, without too much loss of dynamics.

DRC off: no equalisation

Proceed as follows to do the settings:

- Press [**⚙**] (4) to access the Settings menu.
- Use [**NAVIGATE/ENTER/VOLUME**] (9) to navigate to the "Volume adjustment" menu item.
- Confirm the selection by pressing [**NAVIGATE/ENTER/VOLUME**] and choose your preferred setting.

10.6 Station sequence

By default the radio sorts stations into alphabetical order. You can also sort by signal strength or ensemble. To change the sorting order, proceed as follows:

- Press [**⚙**] (4) to access the Settings menu.
- Use [**NAVIGATE/ENTER/VOLUME**] (9) to navigate to the "Station sequence" menu item.
- Choose between "Alphabetic", "Provider" and "Valid" and confirm your selection by pressing [**NAVIGATE/ENTER/VOLUME**].

11. FM

From the main menu or after pressing [**M**] repeatedly, activate operating mode **FM (FM Radio)** on the radio.

Alternatively, press [**FM**] on the remote control to switch directly to this operating mode.

Stations that broadcast additional information regarding the station and the programme, are highlighted on the display with an RDS icon (Radio Data System). This additional information is displayed by pressing [**i**].

11.1 Scan setting

The search setting allows you to determine whether stations with low signal strength are ignored during the automatic search. Proceed as follows:

- Press [**⚙**] (4) to access the Settings menu.
- Use [**NAVIGATE/ENTER/VOLUME**] (9) to navigate to the "Scan settings" menu item.
- Confirm the selection by pressing [**NAVIGATE/ENTER/VOLUME**].
- To have the search run stop only at stations with high signal strength, select **Strong stations only**. Otherwise, the search run will stop at every station for which a signal is received.

Note



By default, the "Strong stations only" method is selected.

11.2 Search / Automatic search

- Press [**NAVIGATE/ENTER/VOLUME**] to start a station search.
- The radio stops the search and starts playback when it finds a station.
- Press [**NAVIGATE/ENTER/VOLUME**] again to continue the search until the next station is found.



11.3 Manual station search

With manual station settings, you can define the required frequency yourself and also receive stations that had signals too weak to pick up on the automatic station search and which therefore were not included.

- Press [↔] (7) to switch to the manual station settings.
- Turn [enter/navigate] (left: - 0.05 MHz / right: + 0.05 MHz) until the desired frequency is displayed. Wait a moment until playback of the received station signal begins.
- Press [↔] (7) again to exit the manual station settings.

11.4 Favourites (local)

You can save up to 20 of your favourite stations for quick and direct access.

11.4.1 Assigning the Presets shortcut buttons

- Set the station that you would like to save as a station preset.
- Once the station is playing, press and hold the relevant shortcut button for around 3 seconds.
- The selection will be confirmed by the display showing "Program (1-4, depending on the shortcut button) saved".
- During playback, the Preset memory slot is displayed at the bottom edge of the screen.

Note

Favourites cannot be deleted. If all 20 station memory slots are filled and you wish to save a new station, choose one of the occupied slots. The station in this slot will be overwritten with the new station.

11.4.2 Calling up shortcut button presets

To call up a preset station, press the corresponding shortcut button (2-5).

11.4.3 Assigning the list of presets (1-20)

- Set the station that you would like to save as a station preset.
- If the stations is playing, press and hold [H] (3) for approx. 3 seconds until the Presets list opens up.
- Navigate to the preferred memory slot and confirm your selection by pressing [NAVIGATE/ENTER/VOLUME] (9).
- The selection will be confirmed by the display showing "Program (1-20, depending on the memory slot) saved".

11.4.4 Calling up a station from the Presets list (1-20)

- Press [H] to call up the Presets list.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the preferred station and confirm your selection by pressing [NAVIGATE/ENTER/VOLUME].

11.5 Audio setting

For some stations with a weak signal, quality can be slightly improved by playing them in mono quality. You can enable this function in the menu, and the radio will automatically switch to mono reception when signal quality is poor.

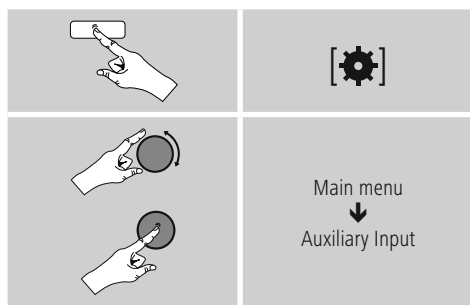
To change the audio setting, proceed as follows:

- Press [⚙] (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Audio setting" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME] and choose your preferred setting.

12. Auxiliary Input

Via the analogue audio input (AUX IN socket) you can connect mobile devices (for example smartphone, tablet PC, M3 player etc.) to the radio and play the audio files using the radio's speakers.

- From the main menu or after pressing [M] / [MODE] repeatedly, enable **Auxiliary Input (Aux in)** mode on the radio:



Alternatively, press [AUX] on the remote control to switch directly to this operating mode.

- Connect your mobile terminal device and the audio input (AUX IN socket) on the radio using a 3.5 mm audio cable.
- Start and control audio playback accordingly via the connected device.



13. Bluetooth®

You can pair your terminal device with the radio using Bluetooth and use it as a playback device. You can control playback directly on the terminal device. You can adjust the volume on the radio, as well.

Note – Bluetooth®



- Check whether your mobile device (smartphone, tablet PC. etc.) is Bluetooth-capable.
- Note that the maximum range for Bluetooth® is 10 metres without obstacles such as walls, people, etc.
- The connection may be disrupted by other Bluetooth® devices/connections in the vicinity.
- It is only possible to connect the radio to one terminal device.
- Note that compatibility depends on the supported Bluetooth® profiles as well as the Bluetooth® versions being used. (See: Technical data in the operating instructions for the respective device).

By repeatedly pressing [M] / [MODE], enable Bluetooth® mode on the radio:



Alternatively, press [BT] on the remote control to switch directly to this operating mode.

13.1 Bluetooth® pairing

- Make sure that your Bluetooth® capable terminal device is switched on and that Bluetooth® is activated.
- By repeatedly pressing [M] / [MODE], enable Bluetooth® mode on the radio:



- Press [⚙️] (4) to access the Settings menu.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Setup Bluetooth" menu item.
- Open the Bluetooth® settings on your device and wait until the list of found Bluetooth® devices shows **DIR90BT**.
- If necessary, start searching for Bluetooth® devices on your device.
- Select **DIR90BT** and wait until radio is listed as connected in the Bluetooth® settings of your device.

- Your device is also shown as connected on the radio display.
- Start and control audio playback using the controls on your device.

Note - Bluetooth® password



Some devices require a password in order to connect to another Bluetooth® device.

- If your device requests a password to connect to the loudspeaker, enter **0000**.

13.2 Automatic Bluetooth® connection (after successful pairing)

- Devices already paired with the radio are automatically saved on the radio.

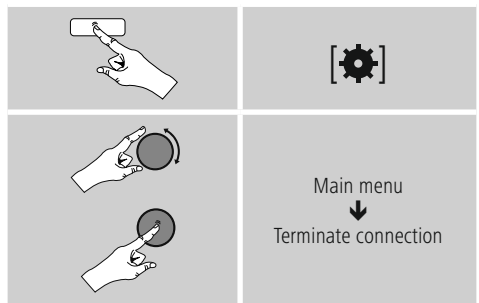
Note - connection impaired



After the radio and terminal device have been paired, a connection is established automatically. If the Bluetooth® connection is not established automatically, check the following:

- In your device's Bluetooth® settings, check that **DIR90BT** is connected. If not, repeat the steps listed under Bluetooth® pairing.
- Check that your device and the radio are less than 10 metres apart. If not, move them closer together.
- Check whether obstacles are impairing the range. If so, move the devices closer together.

13.3 Terminating the Bluetooth® connection



- Then turn [VOLUME/ENTER/NAVIGATE] to select the **YES** button and confirm the termination of the Bluetooth connection by pressing [ENTER/NAVIGATE].



14. Other connection options

14.1 Connection via LINE OUT

You can connect your loudspeaker, for example, to the radio's analogue audio output and play its audio signals via the loudspeaker.

Note



- Switch the radio off before connecting a device to it.
- Do not bend or crush the cable.
- For playback via the analogue audio connection, connect a 3.5 mm RCA cable to the radio's analogue audio output (5) and the loudspeaker's analogue audio input.
- Press **[POWER]** (2) to switch the radio on.
- The radio's audio signal is now output via the loudspeaker.

14.2 Connection via headphone jack

You can connect your headphones to the radio's headphone jack and play its audio signals via the headphones.

Warning – High volumes



- High sound pressure level!
- There is a risk of hearing damage.
- To prevent hearing loss, avoid listening at high volume levels for long periods.
- Always keep the volume at a reasonable level. Loud volumes, even over short periods, can cause hearing loss.



Note



- Reduce the volume of the radio.
- Switch the radio off before connecting headphones to it.
- Note the warning and safety information included in the operating instructions of your headphones.
- Do not bend or crush the cable.
- For playback via the headphone jack, connect the 3.5 mm RCA plug from your headphones to the headphone jack (3) on the radio.
- Press **[POWER]** (2) to switch the radio on.
- The radio's audio signal is now output via the headphones.

15. Sleep

The radio has a timer function, which switches the radio to standby mode after a pre-defined length of time, regardless of its operating mode.

- Press **[⚙️]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Main menu" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Sleep" menu item.
- You can set the timer value with **[NAVIGATE/ENTER/VOLUME]**.
- Confirm the setting by pressing **[NAVIGATE/ENTER/VOLUME]**.
- If the sleep timer is activated, this is indicated in the playback screen by **[ZzZz]**.

16. Alarm

The radio has two individually adjustable alarm times.

16.1 Alarm settings

You can access the alarm settings as follows:

- Press **[⚙️]** (4) to access the Settings menu.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Main menu" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Alarm" menu item.

Alarm 1 and alarm 2 are configured identically and allow two separate alarm times to be saved. Choose Alarm 1 or 2 and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]**.

Set the following details using **[NAVIGATE/ENTER/VOLUME]**.

Mode:

Choose when the alarm is to activate:

Off – Daily – Once – Weekdays – Weekends

Time:

First choose the hour, then the minute at which the alarm is to activate.

Mode:

Set whether you wish to be woken by an alarm tone (**buzzer**), by **DAB, FM** or by the **Internet radio**.



Programme:

If you selected **Internet radio/ DAB/ FM**, choose which station you wish to be woken with. You can choose any of the 20 preset slots or the **Last listened**.

Volume:

You can set the volume at which the alarm sound should be played. This setting makes it irrelevant how loud you last listened to the radio.

Saving:

Select **Off / On** to complete your alarm settings.

Note



It is recommended to allow the radio to update the time automatically. This ensures that the time is always correct even if there is a separation of power supply – for example a power cut.

16.2 Activating / deactivating the alarm

- Confirm the menu item **Save** in alarm settings to activate the alarm.
- Disable the alarm by setting the **Mode** to **Off**.

16.3 Stopping the alarm / Snooze function

- When the alarm activates, press **[P]** to stop the alarm.
- When the alarm activates, press **[NAVIGATE/ENTER/VOLUME]** to enable snooze.
- The alarm turns off for the selected time interval (5/10 minutes) before activating once again.

17. System settings

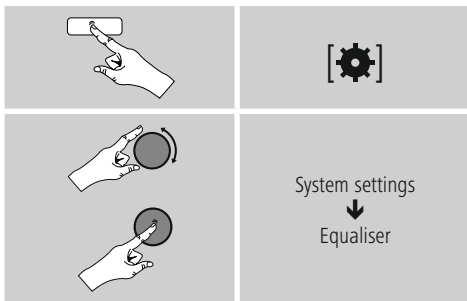
You can modify all settings and access important information about the radio in the System settings.

17.1 Equaliser

The equaliser allows you to adjust the sound of the radio to suit your preferences by amplifying or reducing the amount of bass or treble in the audio.

You can choose from preconfigured profiles, adjusted to suit a variety of music genres, or create your own custom profile.

- To set the equaliser, proceed as follows:



- Use **[NAVIGATE/ENTER/VOLUME]** to select one of the pre-configured profiles.
- To create your own equaliser profile, choose the **My EQ setting** option.
- This takes you to the **bass, treble** and **loudness** settings (volume amplification).
- To adjust a particular value, press **[NAVIGATE/ENTER/VOLUME]** on the corresponding selection and change the values by turning **[NAVIGATE/ENTER/VOLUME]** to the left or right. If playback is already started when you modify these settings, you can hear the changes in the audio immediately.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]** again.
- Once all settings are complete, press **[↵]** on the radio and confirm the saving of settings by pressing **[NAVIGATE/ENTER/VOLUME]**.
- To use the new profile, choose the **My EQ** option.

17.2 Internet settings

17.2.1 Network wizard – Configuration of Internet connection / Search

The **network wizard** helps you set up a connection between the radio and the Internet. More methods of configuration and detailed information are amplified subsequently.

- You can start the **Network wizard** as follows:
- Press **[G]** (4) to go to the system settings.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Internet settings" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Network wizard" menu item.
- When the wizard is started, the radio searches for WLAN (WiFi) connections and then shows a list of the available networks.



- Turn **[NAVIGATE/ENTER/VOLUME]** to switch amongst the networks discovered. At the bottom of the list are options to restart the search ("**[Rescan]**") or configure the connection yourself ("**[Manual config]**").
- If your network is not found or the SSID (Service Set Identification, that is, the name of your network) is not shown, the network may be hidden or out of range. In this case, try manual configuration.

17.2.2 Wireless network connection (WLAN)

Depending on the network, there are a number of ways to connect to it.


Networks that support connection via WPS (Wi-Fi Protected Setup) are identified in the list with the prefix "**[WPS...]**". Other connections are either open networks or connections protected with a PSK, or Pre-Shared-Key.

WPS / PSK / open network connection

WPS allows simple and nevertheless protected connection of the radio to the network. Two options are available for this purpose:

The connection can be set up by means of PBC, or Push-Button Configuration, or by the PIN procedure, in which the web interface of your router prompts you to enter a randomly generated sequence of numbers.

PBC setup

- Select your desired network. (Indicated by the prefix "**[WPS...]**")
- In the WPS menu, choose the "**Push Button**" option and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Press the WPS button on your router or current access point. This can often be done using the web interface, as well.
- Consult the operating instructions of your router or access point for details.
- Once the process has been started on the router or access point, the radio should be able to find and connect to the network.
- Alternatively, PBC setup can be initiated from the radio's Internet settings:
- Press  (4) to go to the system settings.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Internet settings" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "PBC Wlan setup" menu item.

PIN setup

- Select your desired network. (Indicated by the prefix "**[WPS...]**")
- In the WPS menu, choose the PIN option and confirm your selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- The radio generates an 8-digit code, which must be entered into the web or user interface of your router or access point.
- Consult the corresponding handbook for details on configuring the router or access point.

Skip WPS / Pre-Shared Key (PSK) configuration

- Choose the item "**Skip WPS**" to proceed to key entry.
- On networks that do not support WPS, you will go directly to key entry.
- In the input screen, enter the whole key and then confirm with the **OK** button.
- If the key was entered correctly, the radio connects to the access point and establishes the Internet/network connection.

Note



- Often the Pre-Shared Key is printed on the back of the router or access point.
- When entering the key, take notice of capitalisation.

Open network / unsecured network

Note



- We recommend against establishing unsecured connections and advise you to always protect your network against unauthorised access.
- If you plan to use an open network, you just have to select the network from the list of available networks and confirm. The radio then connects immediately with the access point.



17.2.3 Manual configuration of network connection – wireless (WLAN)

- To manually configure a network connection, proceed as follows:
- Press **[⚙️]** (4) to go to the system settings.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Internet settings" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Manual settings" menu item.

Manual configuration wireless (WLAN) – DHCP enable

- Select the option **"Wireless"**.
- Selection the option **"DHCP enable"**.
- In the input screen, enter the whole SSID (network name) and then confirm with the **OK** button.
- Now choose the security standard used by the network. This can be found in the configuration options of your router or access point.
- Depending on the encryption used, you may need to enter the network key before the connection is established.

Manual configuration wireless (WLAN) – DHCP disable

This method corresponds to configuration with an active DHCP server (**manual configuration wireless (WLAN) – DHCP enabled**), however you must also enter the network information such as the IP address, subnet mask, gateway address and DNS (primary and secondary).

Find this information in the web interface of your router or access point, or if this information is already correctly entered, you can confirm the entry. The radio now attempts to establish the connection.

17.2.4 View settings

This is where you will find all of the key information about all network connections that the radio is currently using, or which have been set up, e.g.: MAC address, WLAN region, DHCP enable / disable, SSID, IP address, subnet mask, gateway address, DNS (primary/secondary), etc.

- Press **[⚙️]** (4) to go to the system settings.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Internet settings" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Show settings" menu item.

17.2.5 Network profile

The radio automatically saves all successful network connections (profiles). This means that re-establishing these connections (for example, after the radio was disconnected from the power supply) does not require you to re-enter the network access information.

To remove network profiles individually, proceed as follows:

- Press **[⚙️]** (4) to go to the system settings.
- Use **[NAVIGATE/ENTER/VOLUME]** (9) to navigate to the "Internet settings" menu item.
- Confirm the selection by pressing **[NAVIGATE/ENTER/VOLUME]**.
- Use **[NAVIGATE/ENTER/VOLUME]** to navigate to the "Remove network profiles" menu item.
- Select a network profile and press **[NAVIGATE/ENTER/DELETE]** to remove it.
- Confirm the prompt querying if you want to delete the network profile with **YES**.
- A profile that is currently active, or that is in use, cannot be deleted.

Note



- Before giving or selling the radio to someone else, we recommend performing a factory reset.
- This will completely and permanently delete all network information and connections stored on the device.



17.3 Time/ Date settings

To access the time settings, proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Time and Date" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Update settings" menu item.

Auto update

Update from Internet

Choose this option to set the time and date automatically from the internet. Set the timezone of your current location (**Set timezone**) and, if desired, turn on automatic adjustment between summer time and winter time (**Daylight savings -> ON**).

Update from DAB / FM

If automatic time and date adjustment is activated, the device receives time and date information from the station over the FM/DAB/DAB+ radio network. This is the best way to ensure that the clock will run accurately and the alarm will trigger at the correct time, even after power outages.

No update

The time and date (**DD-MM-YYYY**) must be set manually; no automatic calibration takes place.

Time/ Date settings

Set the date (**DD-MM-YYYY**) and time (**hh:mm**) manually using [NAVIGATE/ENTER/VOLUME].

Format

Choose between 12 and 24 hours format.

17.4 Language

The first time it is used, the radio's default language is German. To change radio's menu language, proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Language" menu item. Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- Use [NAVIGATE/ENTER/VOLUME] to select your preferred system language.
- The language setting currently selected is marked with an asterisk (*).

Note

The following languages are available:
English, German



17.5 Factory reset

To reset the radio to the factory default settings, proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Factory settings" menu item.
- Confirm the following prompt with **YES** to reset the radio to the factory default settings. All settings made previously are deleted.
- To abort the deletion process, press [↩️] or select **NO**.

Note

Resetting to the factory default settings can remedy some problems and malfunctions.



- However, all settings made previously, such as equaliser and presets, permanently deleted.



17.6 Software update

Improvements and new features are always constantly being developed for the software used in our radios to resolve potential errors, increase the range of functions, and so on. We recommend that you always install any available updates on your radio.

Proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] to navigate to the "Software update" menu item.
- Select **Automatic updates (YES)** to allow the radio to automatically check for new software updates on a regular basis. (Recommendation)
- Choose **Check now** to manually start a check for software updates.

Warning



- Make sure that the radio has a stable power supply before you start a software update.
- Power supply failure during a software update can cause irreparable damage to the radio.

Update port

The update port allows you to load software updates manually. The procedure for automatically updating the software can be found under **17.6 Software updates**.

Note



- Available updates and instructions on how to install them can be found at: www.hama.com -> 00054893

17.7 Info

To check the current software version, radio ID and device designation of your radio, proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Info" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].

Note



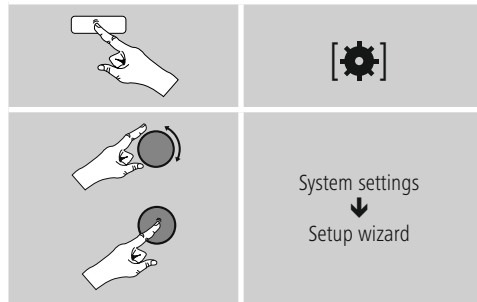
If you require assistance from customer support, please let the agent know the current software version. Problems are frequently resolved through software updates, and your query may be resolved by comparing your software version with the last software version available.

If updates are available, these can be found at www.hama.com with the corresponding article number or designation of the radio.

You may find update instructions in the article's download area.

17.8 Setup wizard

You can restart the setup wizard (see **Setup wizard**) at any time as follows:



17.9 Lighting

The backlight can be configured for each operating mode (Operation Mode, Standby Mode) separately.

Proceed as follows:

- Press [⚙️] (4) to go to the system settings.
- Use [NAVIGATE/ENTER/VOLUME] (9) to navigate to the "Lighting" menu item.
- Confirm the selection by pressing [NAVIGATE/ENTER/VOLUME].
- You can set the brightness with [NAVIGATE/ENTER/VOLUME].

Note



The choice of lighting mode impacts on the power consumption.



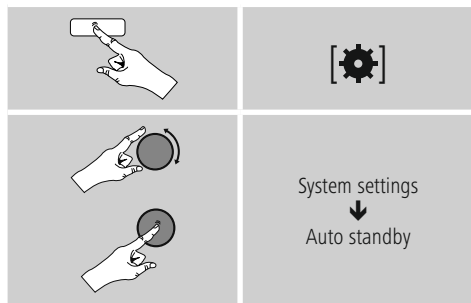
17.10 Auto standby

Note



- For reasons of environmental protection and to save valuable raw materials, the radio automatically switches to standby mode after 15 minutes as soon as the playback has been switched to a very low volume or if the radio has been muted.

To enable or disable this function, proceed as follows:



18. UNDOK – Everything in the palm of your hand

Powered by UNDOK

The UNDOK app, developed by Frontier Silicon, gives you full control of radios and speakers from your smartphone. Whether you are setting up the device for the first time, specifying settings for the equaliser, or managing your favourite stations – the UNDOK app lets you access all the features from your smartphone or tablet, thereby offering you greater convenience.

18.1 First-time setup of the device with UNDOK

The first time you switch on an UNDOK-enabled product from Hama, or when you have set it to the factory settings, it creates a micro access point – a separate Wi-Fi network that you can connect to with your tablet or smartphone.

18.1.1 Procedure for iOS users

- Open the UNDOK app on your iPhone or iPad
- Tap the **Set up audio system** menu item
- Make sure that the radio or speaker is in SETUP mode. Set the product to the factory settings, if necessary. Confirm the query with **Next**
- The UNDOK app now prompts you to connect to the product's Wi-Fi network using the iPhone/iPad settings – to do so, switch to the system settings on your iPhone and select the Wi-Fi network (for example, Setup Hama DIR3120LED). Then return to UNDOK and tap **Next**
- Now choose a name for the radio (for example, Office DIR3120) and confirm your entry with **Next**
- This takes you to the date and time settings – here you set the time format, time source and time zone.
- The various network configuration options are then offered to you (where applicable, Wi-Fi, WPS and Ethernet). Tap the desired method; UNDOK switches to the next window
- Depending on the selected method, you can now select and configure the desired Wi-Fi network, set up a WPS connection.
- Finally, the radio connects to the network; by tapping **Start using my audio system**, you will be able to use the device in UNDOK



18.1.2 Procedure for Android users

- Open the UNDOK app on your tablet or smartphone
- Tap the **Set up audio system** menu item
- Make sure that the radio or speaker is in SETUP mode. Set the product to the factory settings, if necessary. Confirm the query with **Next**
- On the following page, you will find a list of all available Wi-Fi networks as well as the suggested audio systems; the Hama product (for example, Setup Hama DIR3120LED) should be listed here. Tap the corresponding Wi-Fi network.
- Now choose a name for the radio (for example, Office DIR3120) and confirm your entry with **Next**
- This takes you to the date and time settings – here you set the time format, time source and time zone.
- The various network configuration options are then offered to you (where applicable, Wi-Fi, WPS and Ethernet). Tap the desired method; UNDOK switches to the next window
- Depending on the selected method, you can now select and configure the desired Wi-Fi network, set up a WPS connection.
- Finally, the radio connects to the network; by tapping "Start using my audio system", you will be able to use the device in UNDOK.

19. Care and Maintenance

- Only clean this product with a slightly damp, lint-free cloth and do not use aggressive cleaning agents.
- If you do not plan to use the product for a prolonged period, turn off the device and disconnect it from the power supply. Store it in a clean, dry place away from direct sunlight.

20. Warranty Disclaimer

Hama GmbH & Co KG assumes no liability and provides no warranty for damage resulting from improper installation/mounting, improper use of the product or from failure to observe the operating instructions and/or safety notes.

21. Recycling Information

Note on environmental protection:



After the implementation of the European Directives 2012/19/EU and 2006/66/EU in the national legal system, the following applies:

■ electrical and electronic devices as well as

batteries must not be disposed of with household waste.

Consumers are obliged by law to return electrical and electronic devices as well as batteries to the designated public collection points or to the point of sale at the end of their service lives. Detailed information on this topic is defined in the national laws of the respective country. This symbol on the product, the operating instructions or the package indicates that a product is subject to these regulations. By recycling, reusing the materials or other forms of utilising old devices/batteries, you are making an important contribution to protecting our environment.



22. Declaration of Conformity

CE Hama GmbH & Co KG hereby declares that the radio equipment type [00054893] is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.hama.com -> 00054893 -> Downloads.

Frequency band(s)	Bluetooth: 2402 - 2480 GHz WiFi: 2412 - 2472 GHz WiFi: 5150 - 5350 GHz WiFi: 5470 - 5725 GHz
Maximum radio-frequency power transmitted	Bluetooth: 6dBm (EIRP) WiFi: 2.4GHz / 17dBm (EIRP) WiFi: 5GHz / 16.5dBm (EIRP)

Limitations or requirements in

Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, the Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom

Note



If channels 36–64 (frequency 5150–5350 GHz) are used in a 5-GHz WLAN, the product may only be used in closed rooms.



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www.spotify.com/connect/third-party-licenses**

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