

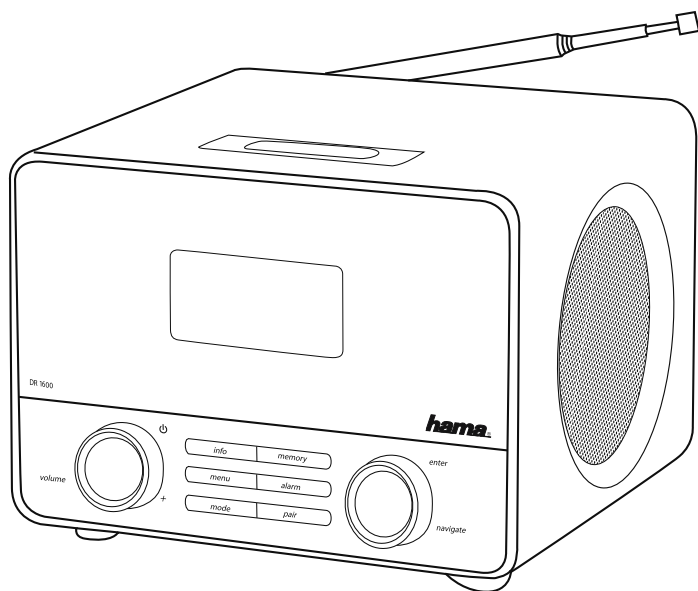
00054820
(DR1600)

hama®

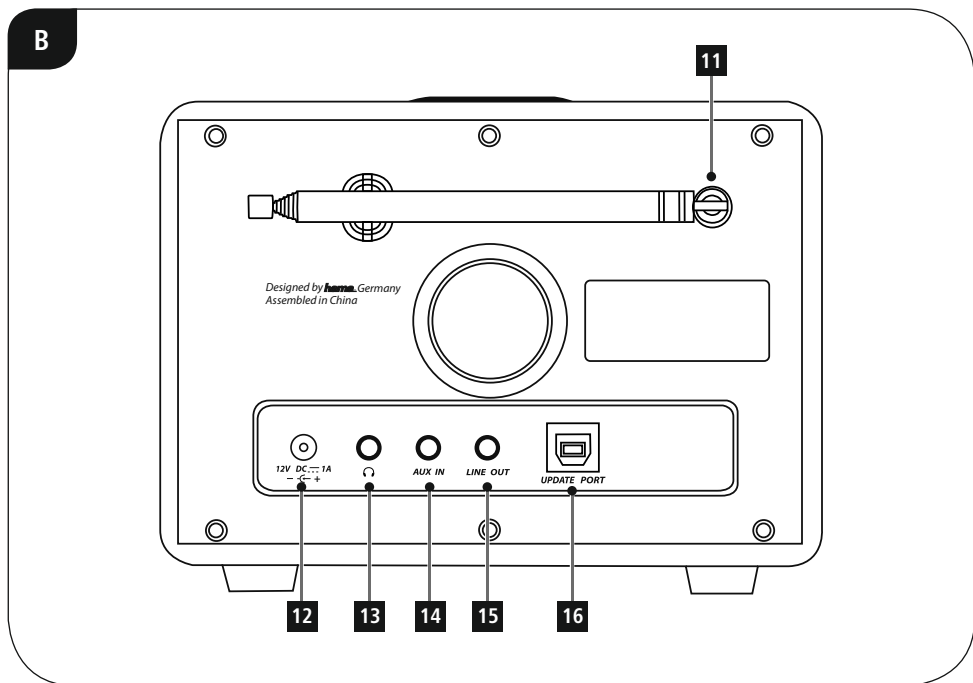
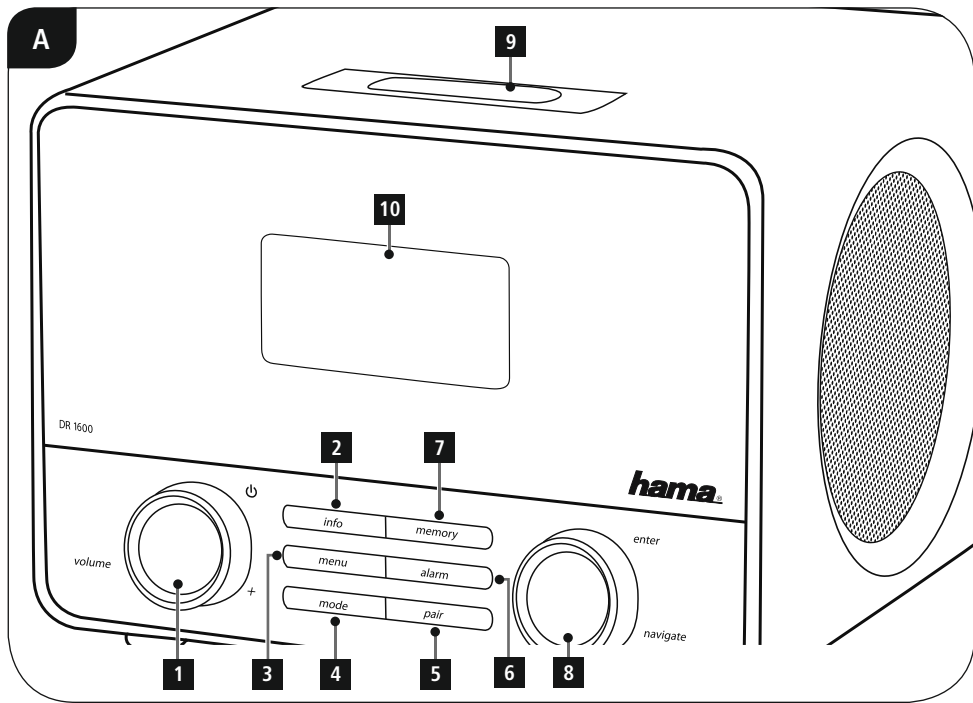
THE SMART SOLUTION

Digital Radio

Digitalradio



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**

Radio Receiver	DAB ✓	DAB+ ✓	FM ✓	Internet -	Spotify -
Connectivity	Bluetooth v. 3.0 (A2DP, AVRCP)				
Display	2.8" 2x16 Icon LCD				
Speaker	10 W RMS (2 x 5W)				
Impedance	4 ohm 2.75" Speaker				
Power input	12 V  1000 mA				
Frequency range	DAB/DAB+: 174-240 MHz		FM: 87.5-108 MHz		
Sensitivity	DAB/DAB+: -97 ~ 99 dBm		FM: -105 ~ 109 dBm		
Power Consumption	Operation	max. 12 W	Standby	< 1 W	
Input & Output	DC Socket, Line Out, Aux in, 3.5mm Earphone Jack, B type USB Jack for firmware upgrade				
Presets	DAB/DAB+: 30	FM: 30			
Codec	DAB: MP2, AAC	Bluetooth AAC, SBC			
UI Languages	English, French, German, Italian, Finnish, Dutch, Danish, Norwegian, Polish, Swedish, Slovak, Czech				
Package Content	Manual, AC-DC Adapter				
Dimension (WxHxD)	163 x 122 x 150 mm				
Weight	1250 g				

Controls and Displays

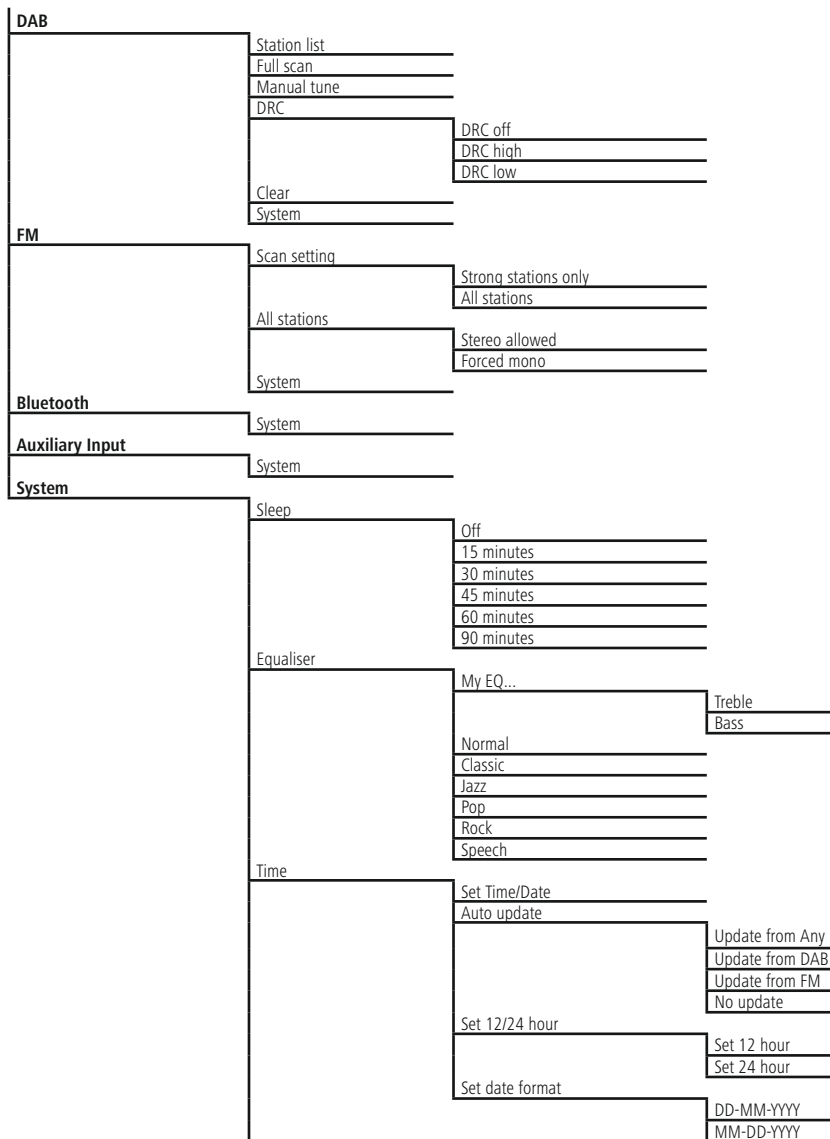
A: Front		
1	[volume +/-] / [⏻]	Rotate: Volume control Press: On/off switch
2	[info]	Display additional information
3	[menu]	Direct access to the menu / Back one menu level
4	[mode]	Changing operating mode (Bluetooth, DAB, FM, Aux in)
5	[pair]	Direct access to pairing mode
6	[alarm]	Direct access to alarm clock settings
7	[memory]	List/save favourites
8	[enter/ navigate]	Rotate: Select Press: Confirm
9	[SNOOZE]	Activating Snooze
10		2.8" LCD

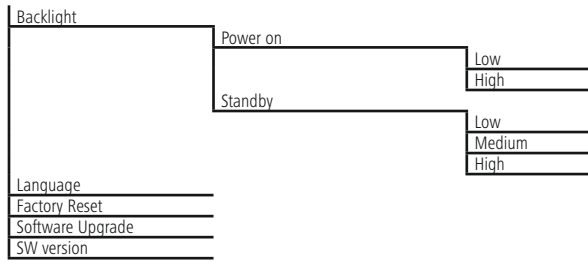
B: Back		
11		Antenna
12		Mains power supply
13		Headphone socket
14		AUX IN socket
15		LINE OUT socket
16		UPDATE PORT SOCKET

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Menu structure





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 product parts energized with a dangerous voltage of sufficient magnitude to constitute a risk of electric shock.



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

- Digital radio DR1600
- AC/DC adapter
- Quick guide/ Operating instructions

3. Safety Notes

- The product is intended for private, non-commercial use only.
- Protect the product from dirt, moisture and overheating and use it in dry rooms only.
- As with all electrical devices, this device should be kept out of the reach of children.
- Do not drop the product and do not expose it to any major shocks.
- Do not operate the product outside the power limits given in the specifications.
- Keep the packaging material out of the reach of children due to the risk of suffocation.
- Dispose of packaging material immediately according to 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 device yourself. Leave any service work to qualified experts.



4. Informations and notes before getting started

Note – Optimal reception

- Please note:
- Always pull the antenna out completely.
- We recommend you adjust the antenna vertically to ensure optimal reception.
- Try various different positions if necessary to get the best reception.

5. Getting started

5.1 Radio – Connecting and starting up

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.

Note

- Only connect the product to a socket that has been approved for the device.
- When using a multi-socket power strip, make sure that the sum power draw of all the connected devices does not exceed its maximum throughput rating.
- The electrical socket must always be easily accessible.
- If you will not be using the product for a long period of time, disconnect it from mains power.

Once the product has been connected to mains power, initialisation takes place.

5.2. General notes on use

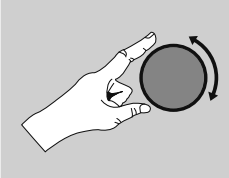

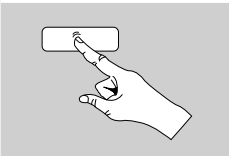
Notes on use

- When a selection among menu items is to be made (such as **Yes** or **No**), the one currently selected is marked with < >.
- In menus offering a variety of different options (such as DRC, Language and so on), the currently selected option is marked with *.

Navigation and controls


- Select among menu items by turning [enter/navigate].
- Confirm the selection by pressing [enter/navigate].

This procedure is indicated in these operating instructions by the following symbols:

Selection (navigate)	Confirmation (enter)
	
	Some features can be accessed by means of shortcut buttons. Pressing shortcut buttons is indicated here by this symbol.

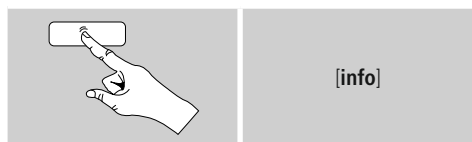
After pressing a shortcut button, navigate amongst the menu items using [enter/navigate].

Volume adjustment / mute

- You can turn the volume up (right) or down (left) by turning [volume -/+] / [] accordingly.

Additional information

Press **[info]** to display context-dependent additional information. The information shown depends on the operating mode as well as the current selection of radio station.



• Description

Indicates the radio station, the current program, contents, subjects, etc.

• Program genre/country

Indicates the genre (music style) and the country or region of the station.

• Bit-Rate

The currently received digital bit rate of the received station is displayed.

• Codec

Specifies the encoding scheme used to digitise the data or signal (such as MP3 or WMA).

• Sampling rate

Specifies the sampling rate, or the frequency with which the audio signal is polled (Sampling-/ Samplerate), in a certain period of time.

• Signal strength

The signal strength of the received station is displayed via a bar and its length.

• Today's date

• Time

• Signal error

• Service not available

Is displayed if there is currently no DAB reception.

Switching on /off / Standby

- Press **[volume +/-] / [⏻]**, to switch the radio on or off (Standby).
- To completely switch off the device, disconnect it from the power supply.

5.3 Initial setup

A station search in DAB operating mode is automatically started when you switch the radio on for the first time. English is the default language for the radio's menu structure. Set up your desired language as described in **12.3. Language**.

6. DAB

The radio receives all established digital radio frequencies in the range of 174 MHz to 240 MHz (band III, channel 5A to 13F).

- After pressing **[mode]** repeatedly, activate operating mode **DAB**:

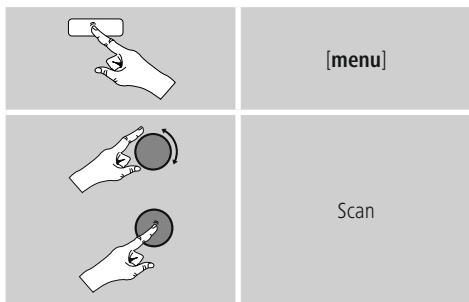


6.1 Search/ Automatic search

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:

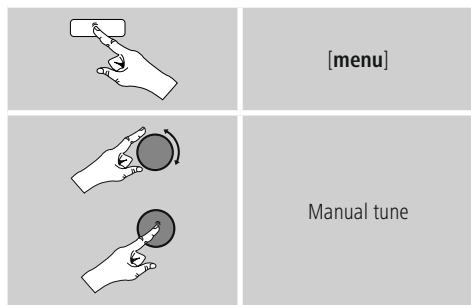


6.2 Manual station search

With the manual station search function you can search through individual frequencies and channels. If you know the frequency of the desired station and the automatic station search failed to find it, use this feature to set the reception frequency directly.



Proceed as follows, choosing a frequency range between 5A and 13F:



The bar indicates the current signal strength. The marking along the bar indicates the value required for interference-free reception. If this value is not reached (the bar is empty), then the signal strength is not sufficient on this channel.

i Note

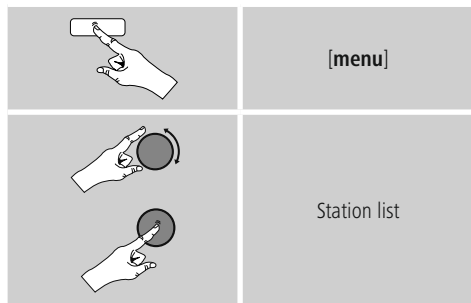
- DAB/ DAB+ permits the transmission of several stations within a single frequency block. When sorting by ensemble the stations are displayed according to how they are distributed across the frequency blocks.

6.3 Station list

You can access the station list in DAB mode at any time via two methods:

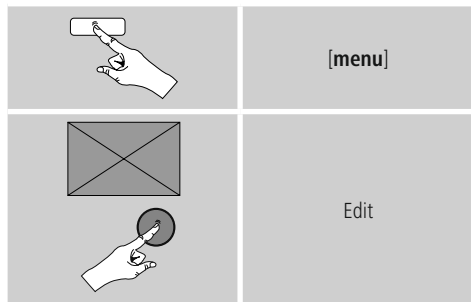
a) If a station is already playing, simply turn **[enter/ navigate]**. The radio will then display the station list.

b)



6.4 Edit station list

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



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



6.5 Presets

You can save up to 10 of your favourite stations for quick and direct access.

6.5.1 Save favourites

- Set the station that you would like to save as a favourite station preset.
- If the station is received, press and hold **[memory]** on front of the radio.



An overview window with the station presets should open after approx. 2 seconds.

- You can switch between the station presets (1 to 30) by turning **[enter/navigate]**.
- Press **[enter/navigate]** to save the station on the desired station preset.

6.5.2 Access favourites

Press **[memory]** to open the overview window with the list of saved stations.



Use **[enter/navigate]** to select one of your favourites.

Note

Favourites cannot be deleted.
If all 10 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.

6.6 DRC (Dynamic Range Control)

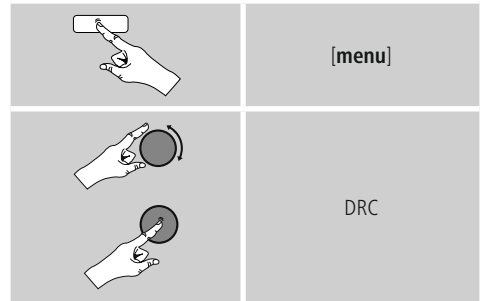
Some radio stations in the DAB network support an audio level control that is activated at varying volumes during playback. If the audio level suddenly rises during playback, DRC automatically reduces the volume. The same happens if playback suddenly becomes quieter, with the radio then increasing the volume. This radio has three different settings for DRC.

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:



7. FM

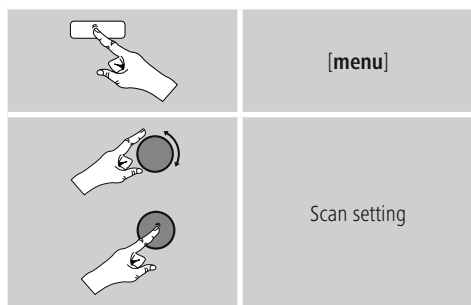
After pressing **[mode]** repeatedly, activate operating mode **FM**:



7.1 Scan setting

The search run setting allows you to determine whether stations with low signal strength are ignored during the automatic search run.

Proceed as follows:



- 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.

7.2 Automatic station search

- Press and hold **[enter/navigate]** until the automatic station search starts.
- The radio stops the search and starts playback when it finds a station.
- Press **[enter/navigate]** to continue the search until the next station is found.

7.3 Manual station search

Bei manuellen Sendereinstellungen haben Sie die Möglichkeit, die gewünschte Frequenz selbst festzulegen und auch Sender zu empfangen, deren Sendesignal bei der automatischen Sendersuche zu schwach war und deshalb nicht berücksichtigt wurde.

- Drehen Sie **[enter/navigate]** (links: - 0.05 MHz/ rechts: + 0.05 MHz) bis die gewünschte Frequenz angezeigt wird. Warten Sie einen kurzen Augenblick und die Wiedergabe des empfangenen Sendesignals beginnt.

7.4 Favoriten

You can save up to 10 of your favourite stations for quick and direct access.

7.4.1 Save favourites

- Set the station that you would like to save as a favourite station preset.
- If the station is received, press and hold **[memory]** on front of the radio.



An overview window with the station presets should open after approx. 2 seconds.

- You can switch between the station presets (1 to 30) by turning **[enter/navigate]**.
- Press **[enter/navigate]** to save the station on the desired station preset.

7.4.2 Access favourites

Press **[memory]** to open the overview window with the list of saved stations.



Use **[enter/navigate]** to select one of your favourites.

i Note

Favourites cannot be deleted.
If all 10 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.

7.5 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 (**Forced mono**) 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:



8. 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.

- After pressing **[mode]** repeatedly, activate operating mode AUX:



- Connect your mobile terminal device to the audio in (the AUX IN socket) of the radio using a 3.5-mm TRS stereo cable.
- Start and control audio playback using the controls of the connected terminal device.

9. 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.

i Note – Bluetooth

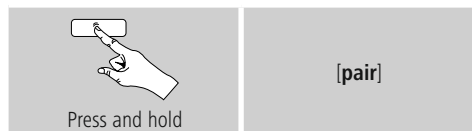
- Check whether your mobile device (smartphone, tablet PC. etc.) is Bluetooth capable.
- Note that the maximum range for Bluetooth is 10 metres without obstacles such as walls, people, etc.
- The Bluetooth connection may be disrupted by other Bluetooth devices/ connections in the vicinity.
- It is only 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, operating instructions of the terminal device in use)

After pressing **[mode]** repeatedly, activate operating mode Bluetooth:



9.1 Bluetooth pairing

- Make sure that your Bluetooth capable terminal device is on and Bluetooth is activated.
- Press and hold **[pair]** to make the radio visible for other devices. **Bluetooth discoverable** will appear on the display.



- Open the Bluetooth settings on your terminal device and wait until **DR1600** appears in the list of Bluetooth devices found.
- If necessary, start searching for Bluetooth devices on your terminal device.
- Select **DR1600** and wait until the radio is listed as connected in the Bluetooth settings on your terminal device.
- Your terminal device is also shown as connected on the radio display.
- Start and control audio playback using the controls of the terminal device.

Note – Bluetooth password

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

- If your terminal device requests a password for connection to the radio, enter **0000**.

9.2 Automatic Bluetooth connection (after successful pairing)

- Terminal devices already paired with the radio are automatically saved on the radio.
- If you are pairing the terminal device with the radio for the first time, proceed as described in **9.1. Bluetooth pairing**.
- Make sure that your Bluetooth capable terminal device is on and Bluetooth is activated.
- Press **[pair]** repeatedly until the terminal device you would like to pair with the radio is shown on the display.
- The devices will be automatically connected.
- If necessary, open the Bluetooth setting on your terminal device and select **DR1600**.
- Start and control audio playback using the controls of the terminal device.

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:

- Check the Bluetooth settings of your terminal device to see whether **DR1600** is connected. If not, repeat the steps listed under Bluetooth pairing.
- Check whether your terminal 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.

10. Sleep

The radio has a sleep function, after a defined time the radio switches to standby mode.

- Repeatedly press **[SNOOZE]** to set the desired time interval (Sleep off/15/30/45/60/90/120 minutes).



- After the defined time the radio switches to standby mode.
- Press **[volume +/-] / [⏻]** to turn the radio back on.
- If a time interval is already activated, you can change or disable it at any time by again pressing **[SNOOZE]**.

11. Alarms

The Radio has two individually adjustable alarm times.

11.1 Alarm settings

Alarm 1 and alarm 2 are configured identically. Select Alarm 1 or 2 by repeatedly pressing **[alarm]** and pressing **[enter/navigate]** to confirm, and then make the following settings by means of **[enter/navigate]**.



Alarm:

- Select **On** to configure the alarm settings. The alarm automatically activates once configuration is complete.
- Select **Off** to deactivate the selected alarm and its settings.

On time:

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

Duration:

Choose a time interval (15/30/45/60/90 minutes). The alarm remains active for the selected time interval.

Source:

Set whether you wish to be woken by an alarm tone (**Buzzer**), by **DAB** or by **FM**.

Preset:

If you selected **DAB/ FM**, choose which station you wish to be woken with. You can choose any of the 10 favourite station slots or the **Last listened**.

Enable:

Choose when the alarm is to activate:

→ Daily – Once – Weekdays – Weekends

Date:

If you selected **Once**, enter the date for the one-off alarm.



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.

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.


11.2 Activating/ deactivating the alarm

- Select Alarm 1 or 2 by repeatedly pressing **[alarm]**, and the option **Alarm On/ Alarm Off** by pressing **[enter/navigate]** to activate/ deactivate the selected alarm (1/2).
- If an alarm is activated, the corresponding symbol /  will be displayed.

11.3 Activate/ deactivate alarm in standby mode

- Press **[alarm]** in standby mode to display the current alarm setting.
- Press **[alarm]** again or rotate **[enter/navigate]** to activate/deactivate alarm 1 and/or alarm 2.
- Press **[enter/navigate]** to confirm your settings.

11.4 Stopping the alarm/ Snooze function

- When the alarm activates, press **[volume -/+]** /  to stop the alarm.
- Repeatedly press **[SNOOZE]** to activate snooze mode.
- The alarm turns off for the selected time interval (5/10 minutes) before activating once again.
- If the alarm is not stopped, the radio automatically switches to standby mode after the preset time interval (duration).



12. System settings

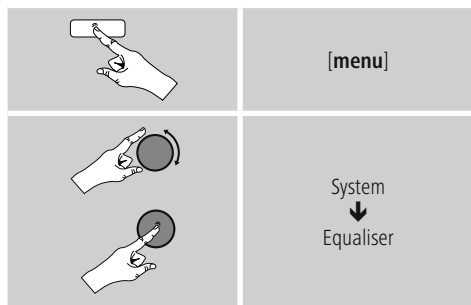
You can modify all settings and access important information about the radio in the System settings.

12.1 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.

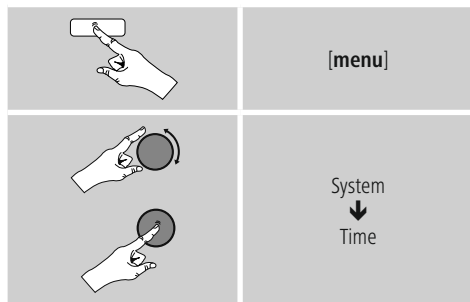
- To set the Equaliser, proceed as follows:



- Use **[enter/navigate]** to choose one of the preconfigured profiles.
- To create your own equaliser profile, choose the option **My EQ...**
- This takes you to the settings for **Bass and Treble**.
- To adjust a particular value, press **[enter/navigate]** at the corresponding menu item and then change the value by turning **[enter/navigate]**. If playback is already started when you modify these settings, you can hear the changes in the audio immediately.
- Confirm your settings by pressing **[enter/navigate]** once more.
- After configuring all the settings, press **[menu]** on the radio and confirm the settings.

12.2 Time/ Date

To access the time settings, proceed as follows:



Auto update

Update from Any/ from DAB/ from 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/MM-DD-YYYY**) must be set manually; no automatic calibration takes place.

Set Time/ Date

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

Set 12/24 hour

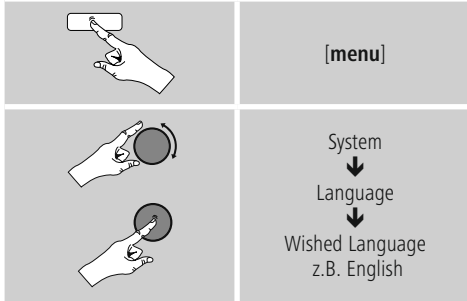
Choose between 12 and 24 hours format.

Set date format

Choose between **DD-MM-YYYY** and **MM-DD-YYYY** date format.

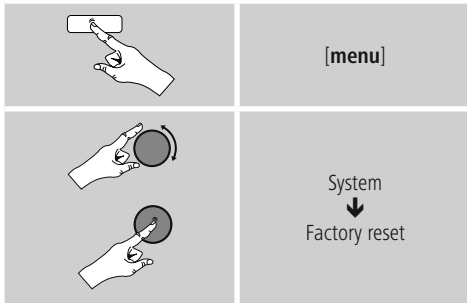
12.3 Language

To change the menu language from that selected at first-time startup, proceed as follows:



12.4 Factory Reset

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



- Confirm the following prompt with **Yes** to reset the radio to the factory default settings.
- All settings made previously are deleted.

Note

- Resetting to the factory default settings can solve some problems and malfunctions.
- However, all settings made previously, such as custom favorites, and station lists are permanently deleted.

12.5 Software update

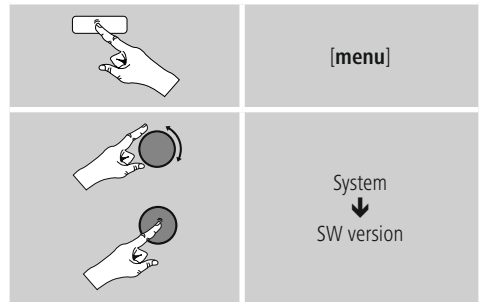
We are constantly developing new software features and improvements for our radios to fix problems, add functionality, etc.

We recommend that you keep your radio's software up to date.

You can find information on performing an update separately on the enclosed sheet and/ or you can download it as a PDF at www.hama.com.

12.6 Info

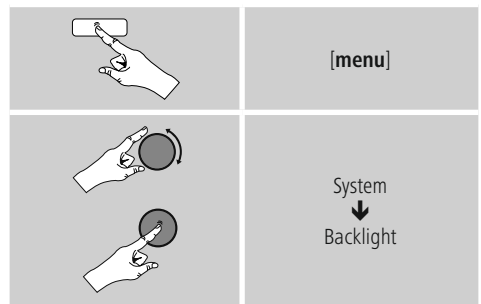
- To have the radio display information about its software, proceed as follows:



12.7 Backlight

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

- Proceed as follows:



- For the operation modes Operation Mode (Power on) and Slumber mode (Sleep mode), select between various brightness levels.
- For Standby Mode (Standby), you may also choose a brightness level for the backlight when the radio is in standby.
- Choose a time interval for **Timeout**. When the radio is in standby, press any button other than [volume +/-] / [⏻] to illuminate the display at the brightness level set for that operating mode for the selected interval of time.
- Press [alarm], the display will light up, and you can also display and configure the current alarm setting, as described in **11.3. Activate/ deactivate alarm in standby mode**.

12.8 AUX: Auto-Standby

In **Aux in (Auxiliary Input)** operating mode, the radio switches to standby mode after 15 minutes, by default.

13. 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 use the product for a long time, turn off the device and disconnect it from the power supply. Store it in a clean, dry place out of direct sunlight.

14. 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.

15. Service and Support

Please contact Hama Product Consulting if you have any questions about this product.

Hotline: +49 9091 502-115 (German/English)

Further support information can be found here:
www.hama.com

16. Recycling Information

Note on environmental protection:



After the implementation of the European Directive 2002/96/EU and 2006/66/EU in the national legal system, the following applies: Electric 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 at the end of their service lives to the public collecting points set up for this purpose or point of sale. Details to this are defined by the national law of the respective country. This symbol on the product, the instruction manual or the package indicates that a product is subject to these regulations. By recycling, reusing the materials or other forms of utilizing old devices/ batteries, you are making an important contribution to protecting our environment.

17. Declaration of Conformity

CE Hereby, Hama GmbH & Co KG declares that the radio equipment type [00054820] 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 -> 00054820 -> Downloads



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