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MCM2450



User manual

PHILIPS

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1 Important

Safety

- Make sure that there is enough free space around the product for ventilation.
- Only use attachments or accessories specified by the manufacturer.
- Battery usage CAUTION – To prevent battery leakage which may result in bodily injury, property damage, or damage to the product:
 - Install the battery correctly, + and - as marked on the product.
 - Remove the battery when the product is not used for a long time.
 - The battery shall not be exposed to excessive heat such as sunshine, fire or the like.
- Use only power supplies listed in the user manual.
- The product shall not be exposed to dripping or splashing.
- Do not place any sources of danger on the product (e.g. liquid filled objects, lighted candles).
- Where the plug of the Direct Plug-in Adapter is used as the disconnect device, the disconnect device shall remain readily operable.



Warning

- Never remove the casing of this device.
- Never lubricate any part of this device.
- Never place this device on other electrical equipment.
- Keep this device away from direct sunlight, naked flames or heat.
- Never look into the laser beam inside this device.
- Ensure that you always have easy access to the power cord, plug, or adaptor to disconnect this device from the power.

Hearing safety



Caution

- To avoid hearing damage, limit the time you use the headphones at high volume and set the volume to a safe level. The louder the volume, the shorter is the safe listening time.

Be sure to observe the following guidelines when using your headphones.

- Listen at reasonable volumes for reasonable periods of time.
- Be careful not to adjust the volume as your hearing adapts.
- Do not turn up the volume so high that you can't hear what's around you.
- You should use caution or temporarily discontinue use in potentially hazardous situations.
- Excessive sound pressure from earphones and headphones can cause hearing loss.

2 Your micro system

Congratulations on your purchase, and welcome to Philips! To fully benefit from the support that Philips offers, register your product at www.philips.com/welcome.

Introduction

With this unit, you can:

- enjoy audio from discs, USB storage devices, or other external devices;
- listen to FM radio stations.

You can select one of the following sound effects:

- Balanced, Warm, Bright, Clear, and Powerful

The unit supports these media formats:

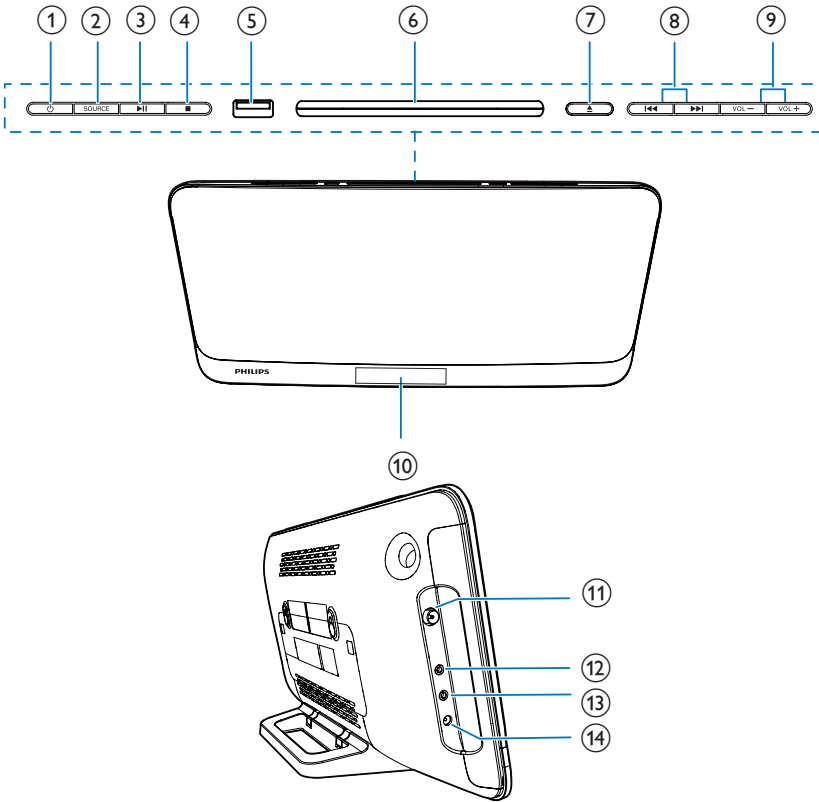


What's in the box

Check and identify the contents of your package:

- Main unit
- 1 x FM wire antenna
- Remote control (with one AAA battery)
- Short User Manual
- Safety sheet
- Wall mounting sheet

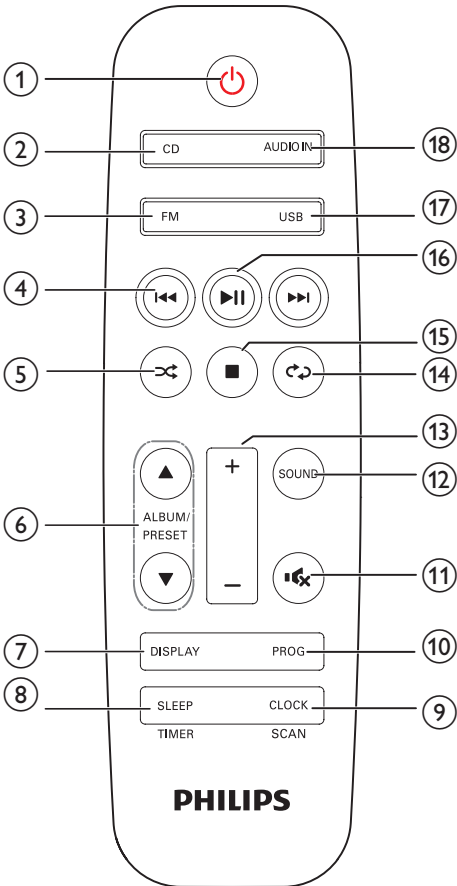
Overview of the main unit



- ① Turn the unit on or off.
 • Switch to standby mode or Eco standby mode.
- ② **SOURCE**
 • Press to select a source: DISC, USB, TUNER, AUDIO IN.
- ③ Start, pause, or resume play.
- ④ Stop play or erase a program.
- ⑤ USB socket.
- ⑥ **Disc compartment**
- ⑦ Open/close the disc compartment.
- ⑧ Skip to the previous/next track.
 • Search within a track/disc/USB.
 • Tune to a radio station.
 • Adjust time.
- ⑨ **VOL+/VOL-**
 • Adjust volume.
- ⑩ **Display panel**
- ⑪ **FM ANT**
 • FM antenna socket.
- ⑫ Headphone socket.

- ⑬ **AUDIO IN**
 - Audio input socket(3.5mm) for an external audio device.
- ⑭ **DC IN 12V \equiv 2.5A**
 - Power socket.

Overview of the remote control



- ① **⏻**
 - Turn the unit on or off.
 - Switch to standby mode or Eco power standby mode.

- ② **CD**
 - Select the DISC source.
- ③ **FM**
 - Press to select the FM source.
- ④ **⏮ / ⏭**
 - Skip to the previous/next track.
 - Search within a track/disc/USB.
 - Tune to a radio station.
 - Adjust time.
- ⑤ **🔀**
 - Play tracks randomly.
- ⑥ **ALBUM/PRESET ▲ / ▼**
 - Select a preset radio station.
 - Skip to the previous/next album.
- ⑦ **DISPLAY**
 - Adjust display brightness.
- ⑧ **SLEEP/TIMER**
 - Set sleep timer.
 - Set alarm timer.
- ⑨ **CLOCK/SCAN**
 - Set the clock.
 - View clock information.
 - Scan FM radio stations.
- ⑩ **PROG**
 - Program tracks.
 - Program radio stations.
- ⑪ **🔇**
 - Mute or restore volume.
- ⑫ **SOUND**
 - Select a preset sound effect.
- ⑬ **+/-**
 - Adjust volume.
- ⑭ **🔁**
 - Play a track or all tracks repeatedly.
- ⑮ **■**
 - Stop play or erase a program.
- ⑯ **▶▶**
 - Start, pause, or resume play.

⑰ **USB**

- Press repeatedly to select the USB source.

⑱ **AUDIO IN**

- Press to select the AUDIO IN source.

3 Get started

! Caution

- Use of controls or adjustments or performance of procedures other than herein may result in hazardous laser exposure or other unsafe operation.

Always follow the instructions in this chapter in sequence.

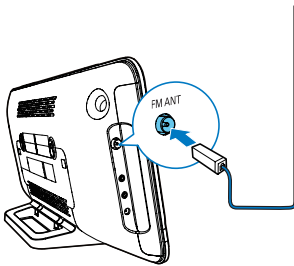
If you contact Philips, you will be asked for the model and serial number of this apparatus. The model number and serial number are on the back of the apparatus. Write the numbers here:

Model No. _____

Serial No. _____

Connect FM antenna

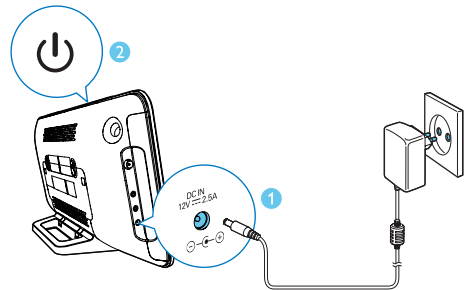
- Connect the supplied antenna to this device before listening to the radio.



Connect power

! Caution

- Risk of product damage! Make sure that the power supply voltage matches the voltage printed on the back of the main unit.
- Risk of electric shock! Before you plug the AC power adaptor, make sure that the adaptor plug converter is fixed securely. When you unplug the AC power adaptor, always pull the plug, never the cord.
- Before you connect the AC power adaptor, make sure that you have completed all the other connections.



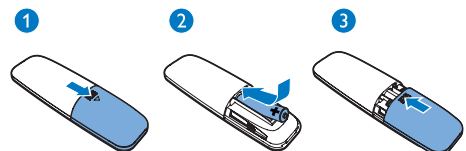
Prepare the remote control

! Caution

- Risk of product damage! When the remote control is not used for long periods, remove the battery.

To insert the remote control battery:

- 1 Open the battery compartment.
- 2 Insert the supplied AAA battery with correct polarity (+/-) as indicated.
- 3 Close the battery compartment.



Set clock

- 1 In standby mode, **CLOCK** on the remote control for 3 seconds.
↳ The [24H] or [12H] hour format is displayed.
- 2 Press **◀▶** to select the [24H] or [12H] hour format.
- 3 Press **CLOCK** to confirm.
↳ The hour digits are displayed and begin to blink.
- 4 Press **◀▶** to select hour and press **CLOCK** to confirm.
↳ The minute digits are displayed and begin to blink.
- 5 Press **◀▶** to select minute and press **CLOCK** to confirm.

Note

- If no button is pressed in 10 seconds, the system exits clock setting mode automatically.

Tip

- You can press **CLOCK** to view clock information in power-on mode.

Turn on

- Press **⏻**.
↳ The unit switches to the last selected source.

Switch to standby mode

- Press **⏻** again to switch the unit to standby mode.
↳ The clock (if set) is displayed on the panel.

Switch to ECO standby mode:

- Press and hold **⏻** for more than 3 seconds.
↳ The display panel is dimmed.

Note

- The unit switches to Eco Power Standby mode after 15 minutes in standby mode.

To switch between standby mode and ECO standby mode:

- Press and hold **⏻** for more than 3 seconds.

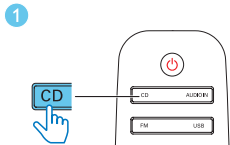
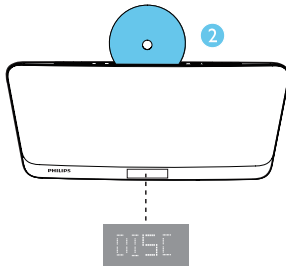
4 Play

Play from disc

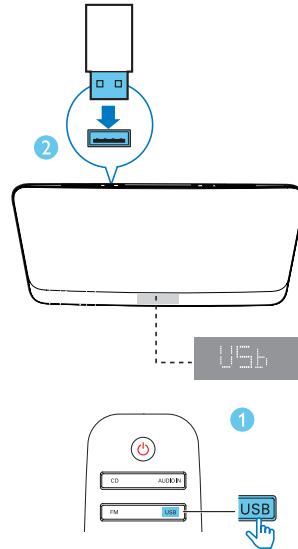
Note

- Make sure that the disc contains playable audio content.

- 1 Press **CD** to select the **DISC** source.
- 2 Insert a disc into the disc compartment with the printed side facing you.
↳ Play starts automatically. If not, press **▶||**.




↳ Play starts automatically. If not, press



Play from USB

Note

- Make sure that the USB device contains playable audio content (see 'Product information' on page 15).

- 1 Press **USB/AUDIO IN** repeatedly to select the **USB** source.
- 2 Insert a USB device into the  socket.

Control play

- ▲ / ▼ Select a folder.
- ⏮ / ⏭ Press to skip to the previous or next track.
Press and hold to search backward/forward within a track.
- ▶|| Pause or resume play.
- Stop play.
- 🔄 Play a track or all tracks repeatedly.
- 🎲 Play tracks randomly (Not applicable for the programmed tracks).

Skip to a track

For CD:

Press ⏮ / ⏭ to select another track.

For MP3 disc and USB:

- 1 Press **ALBUM/PRESET ▲ / ▼** to select an album or a folder.
- 2 Press **⏮ / ⏭** to select a track or a file.

Program tracks

You can program a maximum of 20 tracks.

- 1 Stop play, and then press **PROG/SCAN** to activate programming mode.
- 2 For MP3 tracks, press **ALBUM/PRESET ▲ / ▼** to select an album.
- 3 Press **⏮ / ⏭** to select a track, and then press **PROG/SCAN** to confirm.
- 4 Repeat steps 2-3 to program more tracks.
- 5 Press **▶||** to play the programmed tracks.
 - To erase the program, stop play, and then press **■**.

5 Listen to the radio

Tip

- Position the antenna as far as possible from TV or other radiation sources.
- Make sure that you have connected the supplied FM antenna.
- For optimal reception, fully extend and adjust the position of the antenna.

Tune to a radio station

- 1 Press **FM** to select the tuner source.
- 2 Press and hold **◀◀ / ▶▶** for 3 seconds.
↳ The radio tunes to a station with strong reception automatically.
- 3 Repeat step 2 to tune to more stations.

To tune to a weak station:

- Press **◀◀ / ▶▶** repeatedly until you find optimal reception.

Store FM radio stations automatically

Note

- You can store a maximum of 20 preset radio stations (FM).

- 1 In tuner mode, press **CLOCKSCAN** for more than two seconds to activate automatic programming.
↳ **[AUTO]** is displayed.
↳ All available stations are programmed in the order of waveband reception strength.
↳ The first programmed radio station is broadcast automatically.

- 2 press **▲ / ▼** to select a preset station.

Store FM radio stations manually

- 1 Tune to an FM radio station.
- 2 Press **PROG** to activate programming mode.
↳ **[PROG]** (program) blinks.
- 3 Press **ALBUM/PRESET ▲ / ▼** repeatedly to select a radio frequency.
- 4 Press **PROG** again to confirm.
↳ The frequency of the preset station is displayed.
- 5 Repeat the above steps to store more FM stations.

Note

- To remove a pre-stored station, store another station in its place.

Select a preset radio station

- In FM mode, press **▲ / ▼** to select a preset radio station.

Select stereo/mono broadcast

Note

- Stereo broadcast is the default setting for tuner mode.
 - For stations with weak signals: to improve the reception, change to monaural sound.
- In FM tuner mode, press **▶▶▶** to switch between mono and stereo broadcast.
↳ **[STEREO]** (Stereo) is displayed when the radio station is stereo broadcast.

6 Adjust sound

The following operations are applicable to all supported media.

Select a preset sound effect

- Press **SOUND** repeatedly to select a preset sound effect.
 - **Balanced**(Balanced), **Warm**(Warm), **Bright**(Bright), **Clear**(Clear), and **Powerful**(Powerful).

Adjust volume level

- On the remote control, press **+/-** repeatedly.
- On the main unit, press **VOL+/VOL-** repeatedly.

Mute sound

- Press **MUTE** to mute or restore the sound.

7 Other features



Tip

- If the DISC/USB source is selected, but no disc is placed or no USB connected, the system switches to the tuner source automatically.

Set the alarm timer

This unit can be used as an alarm clock. You can select **DISC**, **USB**, or **TUNER** as the alarm source.



Note

- Make sure that you have set the clock correctly.

- 1 In standby mode, press and hold **SLEEP/TIMER** for three seconds.
- 2 Press **◀◀ / ▶▶** repeatedly to select an alarm source (**DISC**, **USB**, or **TUNER**)
- 3 Press **SLEEP/TIMER** to confirm.
↳ The hour digits begin to blink.
- 4 Repeat steps 2-3 to set the hour, minute, and adjust volume of the alarm.



Note

- If no button is pressed in 90 seconds, the system exits timer setting mode automatically.

To activate or deactivate the alarm timer:

- Press **SLEEP/TIMER** repeatedly to view the alarm information and activate or deactivate the alarm.
↳ If the timer is activated, **[TIMER]**(Timer) is displayed.
↳ If the timer is deactivated, **[TIMER OFF]** (timer off) is displayed and **[TIMER]**(Timer) disappears.

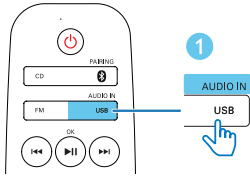
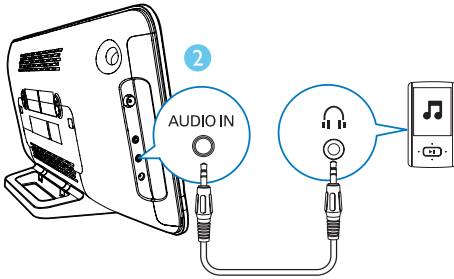
Set the sleep timer

- To set the sleep timer, when the unit is switched on, press **SLEEP/TIMER** repeatedly to select a set period of time (in minutes).
 - **[SLP 120]**
 - **[SLP 90]**
 - **[SLP 60]**
 - **[SLP 45]**
 - **[SLP 30]**
 - **[SLP 15]**
 - **[SLP OFF]**
- ↳ When the sleep timer is activated, **[SLEEP]** (sleep) is displayed. Otherwise, **[SLEEP]** (sleep) disappears.


Listen from an external device

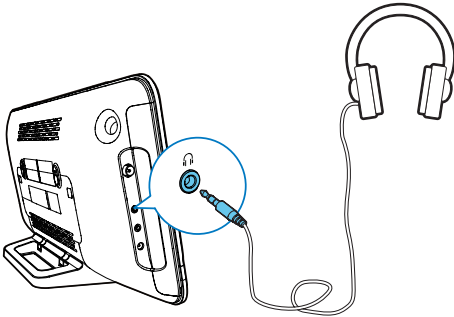
You can listen to an external device through this unit with an audio cable.

- 1 Press **USB/AUDIO IN** repeatedly to select the **AUDIO IN** source.
- 2 Connect an audio cable (not supplied) between:
 - the **AUDIO IN** socket (3.5 mm) on the unit;
 - and the headphone socket on an external device.
- 3 Start to play music on the connected device (see the device user manual).



Listen through a headphone

- Plug a headphone (not supplied) into the  socket.



8 Product information

Note

- Product information is subject to change without prior notice.

Specifications

Amplifier

Rated Output Power	2 x 10 W
Frequency Response	63 -20KHz, +/-3dB
Total Harmonic Distortion	<1%(1 KHz)
Signal to Noise Ratio (A-weighted)	>72dBA
AUDIO IN	650mV RMS 22kohm

Disc

Laser Type	Semiconductor
Disc Diameter	12 cm
Support Disc	CD-DA, CD-R, CD-RW, MP3-CD
Audio DAC	24 Bits/44.1 kHz
Total Harmonic Distortion	<1% (1 kHz)
Frequency Response	63Hz - 20kHz, ±3dB
S/N Ratio	>72dBA

USB

USB Direct Version	2.0 full speed
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Tuner (FM)

Tuning Range	87.5-108 MHz
Tuning grid	50 KHz
Preset stations	20
Sensitivity	
- Mono, 26 dB S/N Ratio	<22 dBf
- Stereo, 46 dB S/N Ratio	<51.5 dBf
Search Selectivity	<28dBf
Total Harmonic Distortion	<3%
Signal to Noise Ratio	>55dBA

General information

AC power	Model: WAHU12000250-102/ AS360-120-AE250 Input: 100-240V~, 50/60 Hz, Output: DC 12.0V, 2.5A
Operation Power Consumption	15W
Eco Standby Power Consumption	<0.5W
Dimensions	
- Main Unit (W x H x D)	465 x 233 x 107 mm
-D-Box (W x H x D)	520 x 323 x 123 mm
Weight	
- Main Unit	2.4 kg
-With Packing	3.6 kg

USB playability information

Compatible USB devices:

- USB flash memory (USB2.0 or USB1.1)
- USB flash players (USB2.0 or USB1.1)
- memory cards (requires an additional card reader to work with this unit)

Supported USB formats:

- USB or memory file format: FAT12, FAT16, FAT32 (sector size: 512 bytes)
- MP3 bit rate (data rate): 32-320 Kbps and variable bit rate
- Directory nesting up to a maximum of 8 levels
- Number of albums/ folders: maximum 99
- Number of tracks/titles: maximum 999
- ID3 tag v2.0 or later
- File name in Unicode UTF8 (maximum length: 32 bytes)
- FLAC files

Unsupported USB formats:

- Empty albums: an empty album is an album that does not contain MP3/WMA files, and will not be shown in the display.
- Unsupported file formats are skipped. For example, word documents (.doc) or MP3 files with extension .dlf are ignored and not played.
- WMA, AAC, WAV, PCM audio files
- DRM protected WMA files (.wav, .m4a, .m4p, .mp4, .aac)
- WMA files in Lossless format
- FLAC via USB

Supported MP3 disc formats

- ISO9660, Joliet
- Maximum title number: 128 (depending on file name length)
- Maximum album number: 99
- Supported sampling frequencies: 32 kHz, 44.1 kHz, 48 kHz
- Supported Bit-rates: 32~256 (kbps), variable bit rates

9 Troubleshooting



Warning

- Never remove the casing of this unit.

To keep the warranty valid, never try to repair the unit yourself.

If you encounter problems when using this device, check the following points before requesting service. If the problem remains unsolved, go to the Philips Web page (www.philips.com/support). When you contact Philips, make sure that the device is nearby and the model number and serial number are available.

No power

- Make sure that the AC power cord of the device is connected properly.
- Make sure that there is power at the AC outlet.
- As a power-saving feature, the system switches off automatically 15 minutes after track play reaches the end and no control is operated.

No sound or poor sound

- Adjust the volume.
- Check that the speakers are connected correctly.
- Check if the stripped speaker wires are clamped.

No response from the unit

- Disconnect and reconnect the AC power plug, then turn on the unit again.

Remote control does not work

- Before you press any function button, first select the correct source with the remote control instead of the main unit.
- Reduce the distance between the remote control and the unit.
- Insert the battery with its polarities (+/- signs) aligned as indicated.

- Replace the battery.
- Aim the remote control directly at the sensor on the front of the unit.

No disc detected

- Insert a disc.
- Make sure that the disc is inserted with the printed side facing upward.
- Wait until the moisture condensation at the lens has cleared.
- Replace or clean the disc.
- Use a finalized CD or correct format disc.

Cannot display some files in USB device

- The number of folders or files in the USB device has exceeded a certain limit. This phenomenon is not a malfunction.
- The formats of these files are not supported.

USB device not supported

- The USB device is incompatible with the unit. Try another one.

Poor radio reception

- Increase the distance between the unit and your TV or other radiation sources.
- Connect and fully extend the supplied antenna.

Timer does not work

- Set the clock correctly.
- Switch on the timer.

Clock/timer setting erased

- Power has been interrupted or the power cord has been disconnected. Reset the clock/timer.

10 Notice

Any changes or modifications made to this device that are not expressly approved by Gibson Innovations may void the user's authority to operate the equipment.

Hereby, Gibson Innovations declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. You can find the Declaration of Conformity on www.philips.com/support.

Disposal of your old product and battery



Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.



This symbol on a product means that the product is covered by European Directive 2012/19/EU.



This symbol means that the product contains batteries covered by European Directive 2013/56/EU which cannot be disposed of with normal household waste.

Inform yourself about the local separate collection system for electrical and electronic products and batteries. Follow local rules and never dispose of the product and batteries with normal household waste. Correct disposal of old products and batteries helps prevent negative consequences for the environment and human health.

Removing the disposable batteries

To remove the disposable batteries, see battery installation section.

Environmental information

All unnecessary packaging has been omitted. We have tried to make the packaging easy to separate into three materials: cardboard (box), polystyrene foam (buffer) and polyethylene (bags, protective foam sheet.)

Your system consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment.



**Be responsible
Respect copyrights**

This item incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. Reverse engineering and disassembly are prohibited.

This apparatus includes this label:



Note

- The type plate is located on the back of the device.



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