

# *hama*®

NETWORK ENTERTAINMENT

## Media Player »MP20«

Ⓒ User manual



00053199

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# Introduction

## Foreword

Dear Customer,

By purchasing this Full-HD media player, you have decided in favour of a quality product from **Hama** that corresponds to the latest development standards with respect to technology and functional performance.

The MP20 is intended for playing back digital media (videos, music and photos) on a television, beamer or computer monitor. Integrate the media player into your home network and access the locally stored files directly.

Please read the information contained in this user manual to familiarise yourself quickly with the device and be able to make full use of its functions.

We wish you a lot of pleasure with the device.

## Information on this user manual

This user manual forms an integral part of the **MF20** media player (hereinafter referred to as device) and contains important information on the intended use, safety, connection and operation of the device.

The user manual must be kept close to the system at all times. Its contents must be read and observed by all persons using the device or remedying faults in the device.

Keep this user manual in a safe place and pass it on with the device to any future owners.

## Liability disclaimer

All technical information, data and instructions on installation, operation of the device contained in this user manual represent the current status at the time of printing and are based on the best possible knowledge gained by experience and know-how.

The manufacturer assumes no liability for damage or injury resulting from failure to observe the user manual, use for other than the intended purpose, unprofessional repairs, unauthorised modifications or use of non-approved spare parts.

## Warnings

The following warnings are used in this user manual:

### **DANGER**

**A warning of this category indicates an impending dangerous situation.**

If the dangerous situation is not avoided, it may lead to serious injury or even death.

- ▶ Follow the instructions in this warning to avoid the danger of serious injury or even death.

### **WARNING**

**A warning of this category indicates a potentially dangerous situation.**

If the dangerous situation is not avoided, it may lead to injuries.

- ▶ Follow the instructions in the warning to prevent injuries to persons.

### **NOTE**

- ▶ A note indicates additional information that simplifies the use of the device.

## Intended use

This device is intended only for playing back or recording digital media on a television, beamer or computer monitor.

Any use other than previously stated is considered as improper use.

### **WARNING**

#### **Danger from use for other than the intended purpose!**

If not used for its intended purpose or used in any other way, the device may be or become a source of danger.

- ▶ Only use the device for its intended purpose.
- ▶ Observe the procedures described in this back.

No claims of any kind will be accepted for damage or injury resulting from use of the device for other than its intended purpose.

The risk has to be borne solely by the operator.

## Copyright

This documentation is protected by copyright.

Any duplication or reprinting, in whole or in part, as well as reproduction of any illustrations even in modified form is only permitted with the written approval of the manufacturer.

It is forbidden by law to copy, broadcast, display, transmit via cable, play back in public or hire out material protected by copyright without the consent of the copyright owner.

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## Safety

This device complies with the prescribed safety regulations. However, improper use can result in personal injury and/or damage to the device.

### Danger of electric current

#### DANGER

##### **Danger to life by electric current!**

##### **Contact with live wires or components could lead to serious injury or even death!**

Observe the following safety precautions to avoid electric shocks:

- ▶ Do not use the device if the AC adapter, the adapter cable or mains plug are damaged.
- ▶ Never open the housing of the AC adapter. Danger of electric shock if live connections are touched and/or the electrical and mechanical configuration is changed.

### Handling batteries

#### WARNING

##### **Danger resulting from improper use!**

Observe the following safety instructions to ensure safe handling of the batteries:

- ▶ Do not throw batteries into a fire.
- ▶ Do not short circuit the batteries.
- ▶ Do not try to recharge the batteries.
- ▶ Check batteries regularly. Leaking battery acid can cause permanent damage to the device. Particular care and attention is required when dealing with damaged or leaking batteries. Danger of acid burning! Wear protective gloves.
- ▶ Keep batteries out of the hands of children. If swallowed, consult a doctor immediately.
- ▶ Remove the batteries from the remote control when the device is not to be used for a longer period of time.

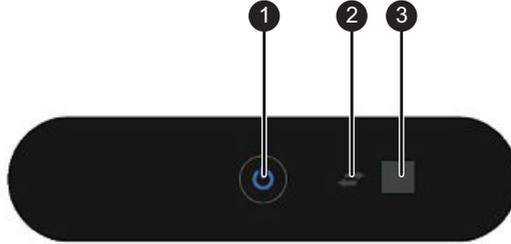
## Fundamental safety precautions

Observe the following safety instructions to ensure safe handling of the device:

- Inspect the device for visible signs of damage before use. Do not use a damaged device.
- Do not allow children to play with the device.
- Persons who due to their physical, mental or motor response abilities are unable to operate the device may only use the device under supervision or instruction by a responsible person.
- Do not open the device. Unauthorised opening and repairs can lead to considerable danger for the user and cause serious damage to the device. Only allow qualified persons to carry out repairs. Improper repairs will void the warranty.
- Repairs to the device during the warranty period may only be carried out by service centres authorised by the manufacturer, otherwise the warranty will become void in the event of subsequent damage.
- Defective parts may only be replaced with original spare parts. Only these parts guarantee that the safety requirements are satisfied.
- Protect the device against moisture and penetration by liquids. If the device comes into contact with liquids, disconnect it from the power supply immediately.
- Clean the housing of the device with a slightly damp cloth. Do not use any aggressive or abrasive cleaning agents or solvents.
- Do not pull on the power cable to remove the mains adapter from the mains socket.
- Do not place any objects on the device.
- Electronic devices are delicate, so avoid knocks and blows.
- Disconnect the mains adapter from the mains socket in the event of faults or during thunderstorms.

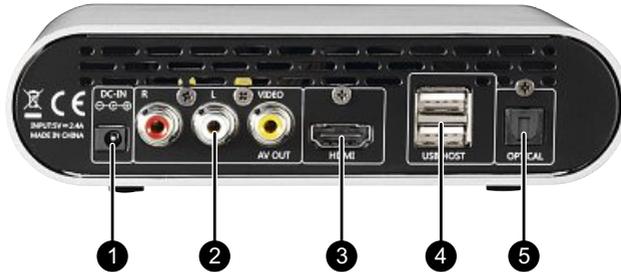
## Design and function

### Front of the device



- ❶ **ON/OFF button and power indicators:** switches the device on or off.  
The power indicator lights up:
  - blue when the device is switched on and
  - red in standby mode.
- ❷ **USB display:** lights up when a USB device is connected.
- ❸ **Infrared remote control sensor:** The remote control sensor receives signals from the remote control.

## Rear side of the device



- ❶ **DC IN:** DC socket for connecting an AC adapter.
- ❷ **A/V OUT:** output for video, right and left audio channel.
- ❸ **HDMI: HDMI interface:** high-definition multimedia interface for connection of an HD TV (high-definition TV) (picture and sound transmission).
- ❹ **2 x USB Host (type A):** two USB for connecting USB devices (e.g., ext. hard disks, MP3 players or USB sticks) to the device.
- ❺ **S/PDIF OPTICAL:** optical audio output for connecting a digital audio system or an audio link to an interfaced television.

## Remote control

All functions of the device can be controlled using the remote control.

1	POWER: ON/OFF
2	MUTE
3	TV SYSTEM
4	INS REPLAY: 10 seconds backwards
5	ZOOM IN
6	CM SKIP: 30 seconds forward
7	EDIT
8	SLOW
9	PLAY/PAUSE playback
10	HOME: Main menu
11	Navigation buttons
12	VOL: Set volume
13	Numeric buttons
14	REPEAT
15	AUDIO
16	MUSIC
17	GOTO
18	Fast rewind
19	Fast forward
20	Previous/Next
21	ENTER: Confirm
22	Return
23	STOP
24	INFO: Info window
25	ZOOM OUT
26	CONFIRM
27	SELECT
28	MENU
29	SUBTITLE
30	SETUP: Settings

## Functions of the remote control buttons

No.	Button	Function
1	 <b>POWER</b>	ON/OFF switch (standby mode).
2	 <b>MUTE</b>	Mute button. Press the button again to switch on the sound.
3	<b>TV SYSTEM</b>	Select TV system/image resolution (NTSC, PAL, 480P, 576P, 720P, 1080I or 1080P).
4	 <b>INS REPLAY</b>	Current playback is rewound back 10 seconds. Ideal for sport programmes.
5	 <b>ZOOM IN</b>	Increase image size.
6	 <b>CM SKIP</b>	Current playback is rewound back 30 seconds. Ideal for finding specific passages.
7	<b>EDIT</b>	Copy, delete, move and rename files, select several files, playlist and edit photo albums.
8	 <b>SLOW</b>	Start slow playback. Return to normal playback speed by pressing the Play button.
9	 <b>PLAY/PAUSE</b>	Start, interrupt or continue playback.
10	 <b>HOME</b>	Display main menu.
11	    <b>NAVIGATION BUTTONS</b>	Move cursor up, down, left and right within a menu.
12	<b>VOL</b>	Set volume.
13	<b>NUMERIC BUTTONS</b>	Enter channel number and other numerical values.
14	<b>REPEAT</b>	Select repeat option (1, all, random or OFF).
15	<b>AUDIO</b>	Select audio track.
16	<b>MUSIC</b>	Start music playback from a playlist.
17	<b>GOTO</b>	Skip to a particular point in the title (mark the point using title, chapter and time).

No.	Button	Function
18	◀◀ FAST REWIND	Rewind current playback.
19	▶▶ FAST FORWARD	Fast forward current playback.
20	◀◀▶▶	Skip to previous title, chapter or file. Skip to next title, chapter or file.
21	↵ ENTER	Select options within a menu.
22	⌫ RETURN	Return to previous submenu.
23	■ STOP	Stop playback.
24	INFO	Display or hide information list during the playback.
25	🔍 ZOOM OUT	Decrease image size.
26	CONFIRM	Confirm selection
27	SELECT	Select files.
28	MENU	Set display type and filter options.
29	SUBTITLE	Set subtitle options.
30	SETUP	Display setup menu.

## Function overview

### AV output

- HDMI V1.3 for output of HD video and audio material
- Optical S/PDIF connection for perfect audio output
- Composite interface (yellow/white/red cinch socket) as analogue AV interface
- Adjustable resolution (NTSC, PAL, 480p, 576p, 720p, 1080i, 1080p)

### Multimedia playback

- Via USB data device
- Film playback:  
AVI/MKV/TS/TP/TRP/M2TS/MPG/MP4/M4V/MOV/VOB/ISO/IFO/  
DAT/WMV/ASF/RM/RMVB/FLV
- Audio playback: MP3/OGG/WMA/WAV/AAC/FLAC
- Photo playback: JPEG/BMP/GIF/TIF/PNG

## Setup and connection

### Safety precautions

 **DANGER**

**Damage to the device or to persons could occur during start-up of the device!**

Observe the following safety precautions to avoid danger:

- ▶ Never play with packaging material. Risk of suffocation.
- ▶ Pay attention to all information on the requirements for the place of operation and the electrical connection of the device to avoid personal injury and material damage.

### Unpacking

- ◆ Remove all parts of the device and the user manual from the box.
- ◆ Remove all packing material and protective film from the device before using for the first time.

## Checking contents and packaging

The device is supplied with the following components as standard:

- Full HD media player
- Audio/video cables
- Remote control
- 2 type AAA batteries (for remote control)
- AC adapter (AC/DC power adapter)
- User manual

### NOTE

- ▶ Check for visible signs of damage or missing items on delivery. Report incomplete or damaged items to your supplier/retailer immediately.

## Disposal of the packaging

The packaging protects the device against damage during transit. The packaging materials have been selected according to environmental and waste disposal aspects and can therefore be recycled.



Recycling the packaging material for further use saves raw materials and reduces the waste. When no longer required, dispose of the packaging materials in accordance with the local regulations.

### NOTE

- ▶ If possible, keep the original packaging during the warranty period in order to be able to pack the device properly in the event of a warranty claim.

## Requirements for the place of operation

For safe and trouble-free operation of the device, the installation location has to satisfy the following requirements:

- The device must be set up on a solid, flat and horizontal surface.
- The device is designed for operation within an ambient temperature range of +5°C to +35°C.
- Do not use the device in a hot, wet or very humid environment.
- Do not expose the device to direct sunlight.
- Do not install the device in the vicinity of magnetic fields.
- Make sure that there is sufficient space for ventilation.
- The mains socket must be easily accessible and enable fast disconnection in the event of an emergency.

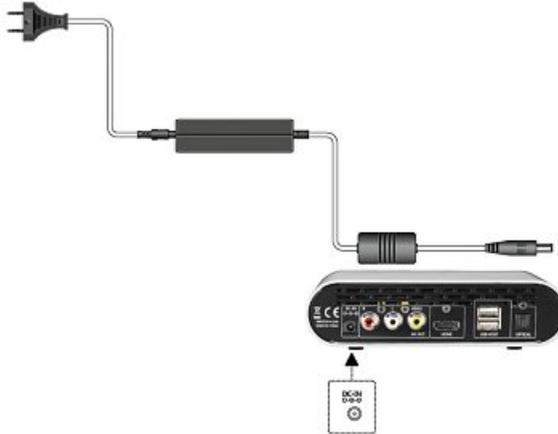
## Electrical connection

For safe and trouble-free operation of the device, the following instructions have to be observed for the electrical connection:

- The device is supplied with 5V DC voltage via the AC adapter provided. Only use the AC adapter provided when connecting to the mains supply.
- Before connecting the device, compare the connection data of the AC adapter (voltage and frequency) on the rating plate with those of your mains supply. This data must correspond in order to avoid damage to the device.
- Make sure that the adapter cable does not come in contact with hot surfaces or sharp edges.
- Make sure that the adapter cable is not stretched tightly or twisted.
- Do not allow the adapter cable to hang over edges (danger of tripping).
- If the device is not to be used for a longer period of time, disconnect the AC adapter from the mains supply.

## Mains connection

- ◆ Plug the AC adapter into the DC IN socket on the back of the device.
- ◆ Insert the AC adapter into a mains socket.

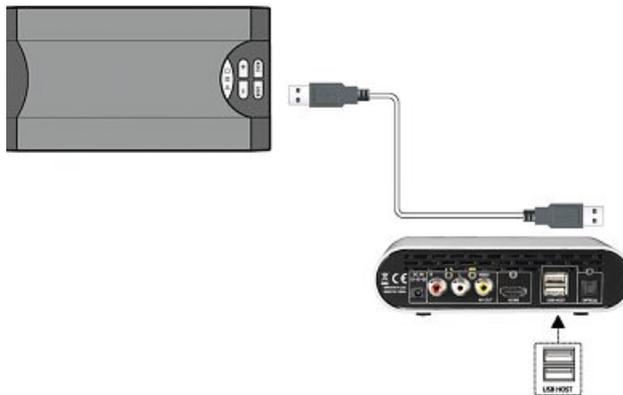


## Additional connections

### Connecting a USB mass storage device

(e.g., MP3 player, external USB storage disk, U disk, USB stick)

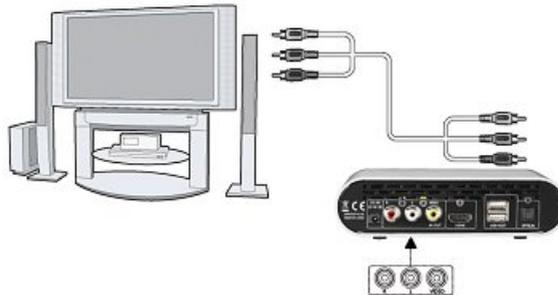
- ◆ Switch on the device.
- ◆ Connect a USB mass storage device (e.g., MP3 player, U disk, USB stick or USB storage disk) to one of the USB ports of the device.



## Connecting to a television

### A/V OUT: audio-video output

- ◆ Insert the 3-coloured connectors (red/white/yellow) to the A/V OUT socket (audio/video output) on the device as illustrated.
- ◆ Insert the 3-coloured connectors directly into the A/V IN socket (audio-video input) or your television or use a Scart adapter (not supplied as standard). Connect the 3-coloured plugs to the Scart adapter and the Scart adapter to the Scart socket of the television.

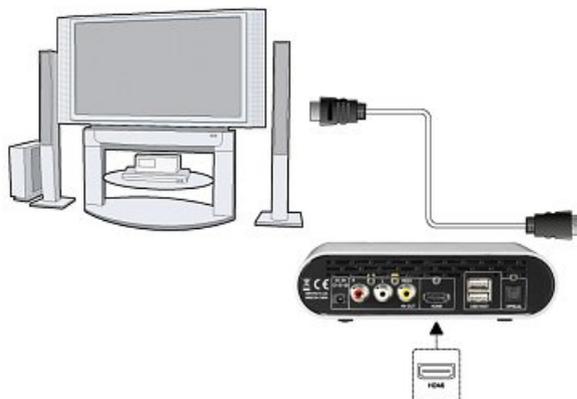


When connection has been established via the audio/video output, files from the device can be played back to the screen of the connected television or other video device.

## HDMI OUT: HDMI- output

The device is equipped with a high-definition multimedia interface (HDMI). HDMI is a high-speed digital interface, which transmits both non-compressed and high-definition video signals. All types of video signal can therefore be transmitted via this output. Sound, even in multi-channel mode, is also transmitted together with the video signals via the HDMI output. You therefore need no additional audio connection between the device and an HD television to transmit the sound. The HDMI output provides the best quality of transmission.

- ◆ Insert one end of the HDMI cable into the HDMI socket on the device as illustrated.
- ◆ Insert the other end of the HDMI cable into the HDMI socket of the HD television as illustrated.

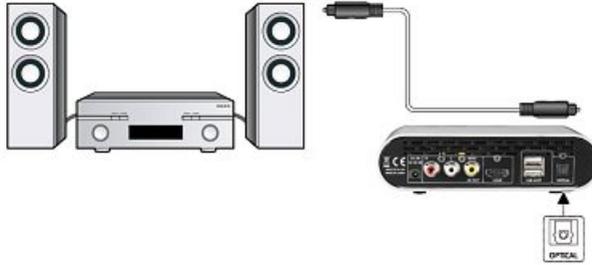


### NOTE

- ▶ The HDMI cable is an optional accessory and not supplied as standard.

### Connecting to a digital audio system

- ◆ Insert the TOSLINK connector of the fibre optic cable into the OPTICAL socket of the device.
- ◆ Insert the other connector of the fibre optic cable into your digital-audio system.



This enables you to hear high-performance Dolby Digital, DTS or MPEG sound.

Further information on configuring can be found in the section "**Changing audio settings**".

#### NOTE

- ▶ The fibre optic cable is not supplied as standard.

## Setting up

### Inserting batteries into the remote control

- ◆ Open the cover of the battery compartment on the back of the remote control.
- ◆ Place the two AAA batteries supplied into the battery compartment and pay attention to the correct polarity.
- ◆ Replace the cover on the battery compartment.

#### NOTE

- ▶ Change the batteries when the range of the remote control decreases or if the media player no longer reacts to all commands.

### Switching the device ON and OFF

#### Switching on

After connecting to the DC IN socket and pressing the ON/OFF button on the front of the device, the main menu appears on the screen and the indicator lamp lights up blue.

#### NOTE

- ▶ Alternatively you can press the  POWER button on the remote control to switch on the device.

#### Switching off

After pressing the ON/OFF button on the front of the device, the device switches to standby mode and the indicator lamp lights up red.

#### NOTE

- ▶ Alternatively you can press the  POWER button on the remote control to switch the device to standby mode.
- ▶ To switch off the device completely, remove the AC adapter from the mains socket.

## Setting the menu language

You can select the language for displaying menu prompts in the setup menu (Settings). Select your preferred menu language. The selected language is immediately activated. Further information can be found in the section "**Setup menu**" under "**Changing system settings**" – "**Change menu language**".



## Operation

All device settings can be accessed via the menus described below.

### Opening the main menu and navigating

- ◆ Switch on the device.

The main menu appears after a few seconds.

#### NOTE

▶ Alternatively you can also press the  HOME button on the remote control to open the main menu.

- Use the     navigation buttons to move within the menus.
- Select the menu items with the  Enter button.

### "Settings" menu

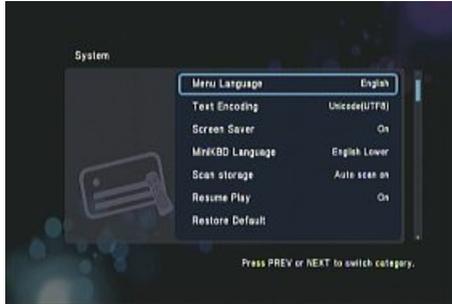
You can configure language, audio, video, recording, network and system settings and adapt them to your requirements in the "Settings" menu.

#### Opening the "Settings" menu and navigating

- ◆ Press either SETUP on the remote control or use the   navigation buttons to select "Settings" in the main menu and press the  Enter button to open the "Settings" menu.
- ◆ Press the   navigation buttons to select the desired menu item (setting).
- ◆ Press the  Enter button to open the menu containing the corresponding setting values (setting options).
- ◆ Press the   navigation buttons to select the desired setting value (setting option).
- ◆ Press the  Enter button to confirm selection and activate the settings.

## Changing system settings

You can configure the system settings in this menu.



### Changing the menu language

You can select your preferred language for the screen menus (OSD) and set it as default language.

- ◆ Select the submenu "System" and the menu item "Menu language" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item with the available menu languages appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select your preferred menu language.
- ◆ Press the Enter button to confirm selection.

### Changing the text encryption setting

You can select your alphabet (character system) and set it as the default under the menu item "Text encryption".

- ◆ Select the submenu "System" and the menu item "Text encryption" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item with the available character systems appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select your preferred alphabet (character system).
- ◆ Press the Enter button to confirm selection.

## Screen saver

You activate/deactivate the screensaver in the "Screensaver" menu item.

- ◆ Select the submenu "System" and the menu item "Screensaver" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select "On" or "Off" to activate/deactivate the screensaver.
- ◆ Confirm selection with the  Enter button.

## Setting the language for the virtual keyboard

You can set the language for the virtual keyboard in the "MiniKBD language" menu item.

- ◆ Select the submenu "System" and the menu item "MiniKBD language" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item with the available keyboard languages appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select your preferred keyboard language.
- ◆ Press the  Enter button to confirm selection.

### Setting data storage device checking

- ◆ Select the submenu "System" and the menu item "Scan storage device" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can set how the device is to react to connection of a USB data storage device in the "Scan memory" menu item. The following options are available:

<b>Auto scan on</b>	Select this option if the table of contents of a USB storage device is to be automatically read during connection or when the device is switched on.
<b>Auto scan off</b>	Select this option if the content of a USB storage device is not to be automatically read during connection or when the device is switched on.
<b>Rescan storage device</b>	Select this option if the content of a connected USB storage device is to be rescanned.
<b>Stop scanning storage device</b>	Select this option to cancel reading of the contents.

- ◆ Use the ▼▲ navigation buttons to select the desired settings option.
- ◆ Press the  Enter button to confirm selection and activate the setting.

## Resume playback

You can set whether the playback of a video is continued from the place where it was stopped (automatic bookmark) in the "Continue playback" menu item.

- ◆ Select the submenu "System" and the menu item "Continue playback" as described in the section "**Opening the setup menu and navigating**".

The selected menu item appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select "On" or "Off" to activate/deactivate the function.
- ◆ Confirm selection with the  Enter button.

## Restore works settings

You can restore the works settings of your device in this menu item and therefore delete (reset) all subsequent changes.

- ◆ Select the submenu "System" and the menu item "Works settings" as described in the section "Opening the setup menu and navigating".

The selected menu item appears on the screen.

- ◆ Use the ▼▲ navigation buttons to select "Yes" and restore the works settings or "No" to cancel the procedure.
- ◆ Press the  Enter button to confirm selection and to restore the works settings.

## Changing audio settings

You can configure the playback for audio files in this menu.



### Night mode

- ◆ Select the submenu "Audio" and the menu item "Night mode" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can activate audio compression or deactivate linear compression of the outgoing audio signal under the "Night mode" menu item. The following options are available here:

<b>On</b>	Select this option if the audio signal is to be transmitted without amplification. This setting is particularly suitable if you wish to listen to music at night because the volume is relatively low.
<b>Off</b>	Select this setting if the audio signal is to be stronger. This setting is more suitable for music playback during the day because the volume is high.
<b>Comfort</b>	Select this option if the audio signal is to be transmitted according to user-defined settings.

- ◆ Use the ▼▲ navigation buttons to select the desired setting value (desired setting option).
- ◆ Press the Enter button to confirm selection and activate the setting.

## HDMI output

- ◆ Select the submenu "Audio" and the menu item "HDMI output" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can select the HDMI output for audio playback in the "HDMI output" menu item. The following options are available: LPCM, LPCM MULTI CH, RAW.

- ◆ Use the ▼▲ navigation buttons to select the desired setting value (desired setting option).
- ◆ Press the  Enter button to confirm selection and activate the setting.

## Digital output

- ◆ Select the submenu "Audio" and the menu item "SPDIF" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can select the desired option for the digital audio output under the "SPDIF" menu item. The following options are available: LPCM, RAW.

- ◆ Use the ▼▲ navigation buttons to select the desired setting value (desired setting option).
- ◆ Press the  Enter button to confirm selection and activate the setting.

## Changing video settings

You can configure the playback for video files in this menu.



### Selecting the aspect ratio

Select the submenu "Video" and the menu item "Aspect ratio" as described in the section ***"Opening the setup menu and navigating"***.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can adapt the picture format of the outgoing video signal to the connected television under the menu item "Aspect ratio".

The following screen formats (screen aspect ratios) are available:

<b>Pan Scan 4:3</b>	Display of a wide picture on the entire screen whereby unnecessary areas are cut out. Select this option if you have connected a TV set with the standard screen (4:3).
<b>Letter Box 4:3</b>	Display of a wide picture with two black bands at the top and bottom of the screen. Select this option if you have connected a TV set with the standard screen (4:3).
<b>16:9</b> <b>16:10</b>	The picture is compressed and displayed as a full-screen picture. Select this setting if the device is connected to wide-screen television. If you select this option for a normal television, the picture will be distorted because of vertical compression.

- ◆ Use the ▼▲ navigation buttons to select the desired picture format.
- ◆ Press the Enter button to confirm selection and activate the setting.

## Setting the video system

- ◆ Select the submenu "Video" and the menu item "TV standard" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can adapt the TV standard of the outgoing video signal (the colour transmission system) to the connected television under menu item "TV standard". The following TV standards (systems for colour transmission) are available here: HDMI Auto, NTSC, PAL, 480p, 576p, 720p 50 Hz, 720p 60 Hz, 1080i 50 Hz, 1080i 60 Hz, 1080p 50 Hz, 1080p 60 Hz.

- ◆ Use the ▼▲ navigation buttons to select the desired TV standard.
- ◆ Press the Enter button to confirm selection.

### Activating digital noise reduction

- ◆ Select the submenu "Video" and the menu item "Digital noise reduction" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item with the corresponding setting values (setting options) appears on the screen.

You can activate/deactivate digital noise reduction for improving image quality under the "Digital noise reduction" menu item.

- ◆ Use the ▼▲ navigation buttons to select "Off" to deactivate or "Autom" to activate the function.
- ◆ Press the  Enter button to confirm selection.

### Activating 1080P 24 Hz mode

- ◆ Select the submenu "Video" and the menu item "1080p 24 FPS" as described in the section **"Opening the setup menu and navigating"**.

The selected menu item appears on the screen.

- ◆ Use the ▼▲ navigation buttons to activate/deactivate this setting.
- ◆ Press the  Enter button to confirm selection.

## Other

You can make various settings under this menu item.

- ◆ Select the submenu "Miscellaneous" as described in the section **"Opening the setup menu and navigating"**.

The selected submenu appears on the screen.



The following menu items are available:

### Version information

- ◆ Select the sub-menu "System" and the menu item "Version information" as described in chapter **"Opening setup menu and navigation"**.

Information in the installed firmware is displayed in the "Version information" submenu.

### Upgrading the system

- ◆ Copy the file "install.img" to the main directory of the USB stick and then connect the stick to the USB port of the device.
- ◆ Select the sub-menu "System" and the menu item "USB expansion" as described in chapter **"Opening setup menu and navigation"**.
- ◆ Use the the ▼ ▲ navigation buttons to select "OK" or "Cancel" to stop updating.
- ◆ Press the Enter button to confirm selection.

#### NOTE

- ▶ An alternative procedure for updating the firmware is described on page 48.

## File manager

You can browse and play back music, photo and video files on the connected USB storage device using the file manager.

### Opening the file manager and navigating

- ◆ Use the ◀▶ navigation buttons to select "File manager" in the main menu and press the  Enter button to open the file manager.



The following buttons and functions of the remote control are available in this mode.

Button	Function
▼ ▲ navigation buttons or ◀ ▶ navigation buttons	Move the cursor up or down to select devices, folders or files.
 Enter	Open or confirm the selected option.
✕ RETURN	Return to previous menu.
MENU	Set display type.
EDIT	Display edit menu.

A file directory listing all the available files (with files in all supported formats) on the selected medium is displayed on the screen.



- ◆ Press the ▼▲ navigation buttons to select the desired directory, the desired file folder or the desired file.
- ◆ Press the Enter button to open the selected folder or to play back the selected file.

## NOTE

- ▶ Further information on the supported formats can be found in the section "**Technical data**".

## Setting the display type

- ◆ Press the MENU button in the file manager to set the display type.

A context menu is displayed.

- ◆ Use the ▼▲ navigation buttons to set the desired display type.
- ◆ Confirm selection with the Enter button.

## Editing files or folders

- ◆ Press the EDIT button to edit files or folders and create file lists. The edit menu will be displayed.



- ◆ Use the ▼▲ navigation buttons to select the desired option.
- ◆ Confirm selection with the Enter button.

The following buttons and functions are available during editing:

Button	Function
▼▲ navigation buttons	Move the cursor up or down to select folders or files.
Enter	Open or confirm the selected option.
✕ RETURN	Return to previous menu.
■ STOP	Cancel processing.
ZOOM IN	Create new folder.
▶II PLAY/PAUSE	Add to or remove from file list.
SELECT	Add to or remove from file list.
EDIT	Display edit menu.

## Create a file list

- ◆ Use the ▼▲ navigation buttons to select the "Multiple Select" option in the Edit menu and confirm with the Enter button.



- ◆ Use the ▼▲ navigation buttons to select each desired file/folder and press the SELECT button each time to add the file or folder to the file list.

## Copy or move files

- ◆ Use the ▼▲ navigation buttons to select the desired file or create a file list.
- ◆ Press the EDIT button and use the ▼▲ navigation buttons in the edit menu to select the "Copy" or "Move" option.
- ◆ Use the ▼▲ navigation buttons to select the target media on which the copied files are to be stored.
- ◆ Use the ▼▲ navigation buttons to select the target folder in which the copied files are to be stored.
- ◆ To create a new folder, press the **ZOOM IN** button and enter the folder name via the keyboard that is displayed.
- ◆ Press the **PLAY/PAUSE** button to start copying.
- ◆ Press the **STOP** button to stop copying.
- ◆ After copying is completed, confirm the message displayed with the Enter button.

### Deleting files/folders

- ◆ Use the ▼▲ navigation buttons to select the desired file or create a file list.
- ◆ Press the EDIT button and use the ▼▲ navigation buttons in the edit menu to select the "Delete" option.
- ◆ Confirm selection with the  Enter button.
- ◆ Use the ◀▶ navigation buttons to select "Yes" to delete the file or folder or "No" to cancel.
- ◆ Confirm selection with the  Enter button.

### Renaming files/folders

- ◆ Use the ▼▲ navigation buttons to select the desired file.
- ◆ Press the EDIT button and use the ▼▲ navigation buttons in the edit menu to select the "Rename" option.
- ◆ Confirm selection with the  Enter button.
- ◆ Use the ◀▶ navigation buttons to select the "Rename" option and confirm with the  Enter button.
- ◆ Enter a new name via the keyboard that is displayed.
- ◆ Use the ◀▶ navigation buttons to select "OK" for accepting changes or "CANCEL" to discard changes.

### Create a playlist

- ◆ Create a list of desired music files as described in the section "Create file list".
- ◆ Press the EDIT button and use the ▼▲ navigation buttons in the edit menu to select the "Save playlist" option.
- ◆ Confirm selection with the  Enter button.
- ◆ Enter a file name via the keyboard that is displayed.
- ◆ Use the ◀▶ navigation buttons to select "OK" to save the playlist or "CANCEL" to discard.

The "m3u" file extension is added to playlists.

## Create photo album

- ◆ Create a list of desired photo files as described in the section "Create file list".
- ◆ Press the EDIT button and use the ▼▲ navigation buttons in the edit menu to select the "Save Photo Album" option.
- ◆ Confirm selection with the  Enter button.
- ◆ Enter a file name via the keyboard that is displayed.
- ◆ Use the ◀▶ navigation buttons to select "OK" to save the playlist or "CANCEL" to discard.

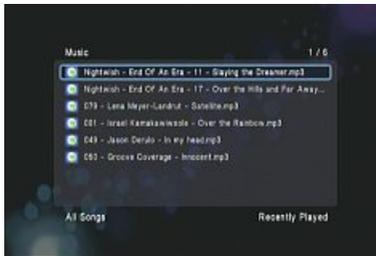
The ".alb" file extension is added to photo albums.

## Music menu

### Playing music files

- ◆ Use the ◀▶ navigation buttons to select "Music" in the main menu and press the Enter button to open the menu.

A file directory listing all the available music files on the selected medium is displayed on the screen.



- ◆ Press the ▼▲ navigation buttons to select the desired directory, the desired file folder or the desired music file.
- ◆ Press the Enter button to open the selected folder or to play back the selected music file.

The following buttons and functions are available during music playback:

Button	Function
▶ <b>PLAY</b>	Start or interrupt playback.
◀◀ <b>Fast Rewind</b> ▶▶ <b>Fast Forward</b>	Wind forward/back. Select the speed by pressing the button repeatedly.
I◀◀ <b>PREV</b> ▶▶ I <b>NEXT</b>	Playback previous or next title.
<b>REPEAT</b>	Repeat settings: 1, all and random.
<b>MENU</b>	Repeat settings: 1, all and random.
■ <b>STOP</b>	Stop playback.

## Editing music files

You can copy, delete, rename and move music files as well as create playlists. See the section **File manager** for more details.

## Display options and filter settings

- ◆ Press the MENU button.  
A context menu is displayed.
- ◆ Use the ▼▲ navigation buttons to select the desired option.
- ◆ Confirm selection with the Enter button.

## Photo menu

### Playing photo files

- ◆ Use the ◀▶ navigation buttons to select the menu item "Photos" (photo files) in the upper menu bar.

A file directory listing all available video files on the selected medium is displayed on the screen.



- ◆ Press the ▼▲ navigation buttons to select the desired directory, the desired file folder or the desired photo file.
- ◆ Press the Enter button to open the selected folder or to play back the selected photo file (display the selected photo on the screen).

The following buttons and functions are available during photo playback:

Button	Function
▶ <b>PLAY</b>	Start playback.
I ◀◀ <b>PREV</b> ▶▶ I <b>NEXT</b>	Display previous or next photo.
🔍 <b>ZOOM OUT</b>	Zoom picture (increase/decrease size).
🔍 <b>ZOOM IN</b>	
■ <b>STOP</b>	Stop playback.

### Editing photo files

You can copy, delete, rename and move photo files as well as create photo albums. See the section **File manager** for more details.

### Display options and filter settings

- ◆ Press the MENU button.

A context menu is displayed.

- ◆ Use the ▼▲ navigation buttons to select the desired option.
- ◆ Confirm selection with the  Enter button.

### Displaying photos with background music

To display photos with background music, proceed as follows:

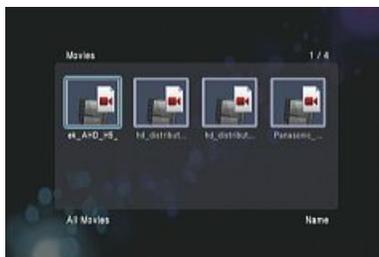
- ◆ Create a photo album containing the desired photos.
- ◆ Then start music playback (single file or playlist).
- ◆ Start photo album playback.

## Film menu

### Browsing video files

- ◆ Use the ◀▶ navigation buttons to select the menu item "Films" (video files) in the upper menu bar.

A file directory listing all available video files on the selected medium is displayed on the screen.



- ◆ Press the ▼▲ navigation buttons to select the desired directory, the desired file folder or the desired video file.
- ◆ Press the ⏏ Enter button to open the selected folder or to play back the selected video file.

The selected video film (the selected film) is played back on the screen (in full-screen mode).

The following buttons and functions are available during the video playback:

Button	Function
<b>▶ PLAY/PAUSE</b>	Start/interrupt playback.
<b>I▶ SLOW</b>	Slow playback. Set the speed by pressing the button repeatedly.
<b>◀◀Fast Rewind</b> <b>▶▶Fast Forward</b>	Wind forward/back. Set the speed by pressing the button repeatedly.
<b>I◀◀ PREV</b> <b>▶▶I NEXT</b>	Play back previous or next film.
<b>REPEAT</b>	Repeat settings: 1, All and OFF.
<b>🔍 ZOOM OUT</b>	Zoom picture (increase/decrease size).
<b>🔍 ZOOM IN</b>	
<b>INFO</b>	Display/hide information list during playback.
<b>GOTO</b>	Displays the playback search menu.
<b>MENU</b>	During DVD playback: Context menu with setting options.
<b>AUDIO</b>	Change the audio track during playback of DivX videos or DVDs with several audio tracks.
<b>SUBTITLE</b>	Subtitle options. Change the text encryption and size/colour/time delay of subtitles.
<b>■ STOP</b>	Stop playback.
<b>← INS REPLAY</b>	Current playback is rewind 10 seconds.
<b>→ CM SKIP</b>	Current playback is fast forwarded 30 seconds.

## DVD playback

DVD files stored on a USB storage device can be played back directly on the device.

### *NOTE*

- ▶ The VIDEO\_TS and AUDIO\_TS folders must be copied into the same folder. The name of this folder is displayed in the browser as a playable file.

## Display options and filter settings

- ◆ Press the MENU button.

A context menu is displayed.

- ◆ Use the ▼▲ navigation buttons to select the desired option.
- ◆ Confirm selection with the  Enter button.

## Updating the firmware

The firmware is installed on the device as an operating system (OS). A firmware upgrade means that new elements and improvements are added to the existing operating system.

To install a new firmware version, proceed as follows:

- ◆ Copy the file 'install.img' or the expansion files to the main directory of the USB stick.
- ◆ Switch off the device by pressing the ON/OFF button and remove the power cable of the mains adapter from the DC IN socket on the back of the device.
- ◆ Insert the USB stick to the USB PORT on the device.
- ◆ Keep the ON/OFF button on the front of the device pressed; do not release it.
- ◆ Insert the power cable into the DC IN socket and wait 15 seconds or longer. Then release the ON/OFF button.

The firmware is installed. Information on another method of installation can be found under "**Changing system settings – Upgrading the system**" in the section "**Setup menu**".

### NOTE

- ▶ New firmware versions can be found at [www.hama.com](http://www.hama.com)

## Troubleshooting

### Troubleshooting chart

Before sending the device to after-sales service, use the following table to check whether you can remedy the problem yourself.

Fault	Possible cause	Remedy
Power indicator does not light up	Power adapter not properly connected	Make sure the power adapter is plugged into the mains socket and connected to the device.
	No voltage from the mains socket	Check the fuses.
	Device is defective	Contact customer service.
Remote control does not work	Pointing the wrong way	The remote control is not pointing towards the device.
	Too far away	Ensure that the remote control is not too far away from the device.
	Batteries empty	Change the batteries in the remote control; pay attention to correct polarity when inserting the new batteries!
No picture appears on the television screen	Cable not connected correctly	Ensure that the interface cable is properly connected to the correct output of the device and the correct input of the television.
	Wrong input signal selected for the television	Switch your television to the correct AV input.

Fault	Possible cause	Remedy
No sound can be heard	Device switched to mute	Press the MUTE button on the remote control to cancel the mute setting.
	No audio connection with component video	Ensure that an additional audio connection has been made.
No colour is displayed	Wrong TV norm selected	Set the correct TV norm (PAL/NTSC) in the setup menu.
	Wrong colour settings on the television	Correct the colour setting on the television.

## Frequently asked questions (FAQs)

**Question 1. Why is it not possible to play DVDs on the device?**

**Answer:**

Make sure that the VIDEO\_TS and AUDIO\_TS folders are together in the same folder.

**Question 2. My files have disappeared from the device.**

**Answer:**

Check the filter settings.

**Question 3. Why does the television have a briefly flashing blue screen or screen saver during operation?**

**Answer:**

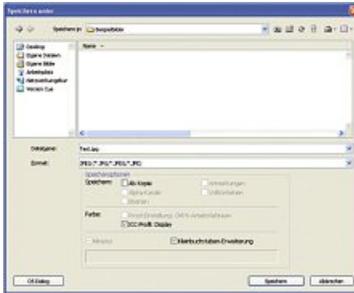
This is normal during initialisation of the system. It creates the corresponding parameters so that it can transmit the correct video signals to the television. If the television receives incorrect signals during initialisation or the signals are not stable and flickering occurs on the screen, some televisions regard this situation as no signal, resulting in the display of the blue screen or the screen saver.

## Question 4. Why are some pictures not displayed in the photo function even though the format is supported?

### Answer:

There are various different JPEG formats. This device does not support all of them. In this case, change the image format as follows:

- Load the picture into Photoshop or another image processing programme.
- Select "File" in the menu and then "Save as" as illustrated in the left. Select the JPEG format, enter the file name and click on the "Save" symbol.
- After clicking "Save", a new window is opened as illustrated on the right. Select "Baseline (standard)" or "Optimised baseline";



- Click the "OK" symbol.

## Question 13. Some function such as playlist etc do not function. What should I do?

### Answer:

If certain functions of the device do not work correctly, reset the system settings to the works settings (see **"Changing system settings"** in the section **"Setup menu"**).

### NOTE

- ▶ If you cannot resolve the problem with the steps described above, please contact customer service.

## Storage

If you do not intend to use the device for a longer period of time, switch off the device and disconnect it from the power supply and keep it in a clean and dry location without direct exposure to sunlight.

## Appendix

### Support and contact information

#### For faulty products:

In the event of product complaints, please contact your retailer or Hama product support.

#### Internet/World Wide Web:

Product support, new drivers or product information can be obtained from [www.hama.com](http://www.hama.com)

#### Support hotline – Hama product support:

Tel. +49 (0) 9091 / 502-115

Fax +49 (0) 9091 / 502-272

Email: [produktberatung@hama.de](mailto:produktberatung@hama.de)

### Notes on EC Declaration of Conformity



Hama GmbH & Co. KG declares herewith that this device is in conformity with the fundamental requirements and the other relevant regulations and stipulations of the Low-Voltage Directive 2006/95/EU and of the EMC Directive 2004/108/EU.

The complete original declaration of conformity is available on the Internet at <http://www.hama.com>.

## Technical data

### Supported I/O interfaces

- 2x USB 2.0 PORTS (compatible with USB 1.1)
- Composite A/V OUT socket (CVBS)
- HDMI V1.3 interface
- Optical S/PDIF socket
- DC IN 5V

### Supported file systems

- FAT/FAT32/NTFS/EXT3

### Supported formats

- AVI/MKV/TS/M2TS/MPG/MP4/MOV/M4V/VOB/ISO/IFO/DAT/WMV/ASF/RM/
- RMVB/FLV, definition up to 720p/1080i/1080p
- MP3/OGG/WMA/WAV/AAC/FLAC
- HD JPEG/BMP/GIF/TIF/PNG

### Supported video formats

- MPEG-1
- HD MPEG-2
- HD MPEG-4 SP/ASP/AVC (H.264)
- WMV9 (VC-1)
- RealNetworks (RM/RMVB) 8/9/10, up to 720p

### Supported audio formats

- MP2/3, OGG Vorbis, WMA (DRM and Advanced Profile are not supported), PCM, LPCM, MS-ADPCM, LC-AAC, HE-AAC, COOK, RA-Lossless

## Supported subtitle formats

- SRT, SMI, SSA, ASS, IDX/SUB, SUB

## General

- Power supply 100 - 240 V/AC, 50/60 Hz
- Current consumption:
  - AC adapter < 0.5 W
  - Standby < 1 W
  - Operation approx. 20 W
- Operating temperature +5°C to +35°C (+36°F to +95°F)
- Humidity during operation 5% to 80% RH
- Dimensions (WxHxD) 230 x 64 x 168 mm
- Net weight (incl. AC adapter) approx. 2.1 kg



The current source code is available on <http://www.hama.com>

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Version 2, June 1991

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# Sourcecodeinformations

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# Sourcecodeinformations

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### **(D) Hinweis zum Umweltschutz:**



Ab dem Zeitpunkt der Umsetzung der europäischen Richtlinie 2002/96/EG und 2006/66/EG in nationales Recht gilt folgendes: Elektrische und elektronische Altgeräte sowie Batterien dürfen nicht mit dem Hausmüll entsorgt werden. Der Verbraucher ist gesetzlich verpflichtet, elektrische und elektronische Geräte sowie Batterien am Ende ihrer Lebensdauer an den dafür eingerichteten, öffentlichen Sammelstellen oder an die Verkaufsstelle zurückzugeben. Einzelheiten dazu regelt das jeweilige Landesrecht. Das Symbol auf dem Produkt der Gebrauchsanleitung oder der Verpackung weist auf diese Bestimmungen hin. Mit der Wiederverwertung, der stofflichen Verwertung oder anderer Formen der Verwertung von Altgeräten/Batterien leisten Sie einen wichtigen Beitrag zum Schutz unserer Umwelt.

### **(GB) 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 utilising old devices/Batteries, you are making an important contribution to protecting our environment.

### **(F) Remarques concernant la protection de l'environnement:**



Conformément à la directive européenne 2002/96/CE et 2006/66/CE, et afin d'atteindre un certain nombre d'objectifs en matière de protection de l'environnement, les règles suivantes doivent être appliquées: Les appareils électriques et électroniques ainsi que les batteries ne doivent pas être éliminés avec les déchets ménagers. Le pictogramme "picto" présent sur le produit, son manuel d'utilisation ou son emballage indique que le produit est soumis à cette réglementation. Le consommateur doit retourner le produit/la batterie usager aux points de collecte prévus à cet effet. Il peut aussi le remettre à un revendeur. En permettant enfin le recyclage des produits ainsi que les batteries, le consommateur contribuera à la protection de notre environnement. C'est un acte écologique.

### **(E) Nota sobre la protección medioambiental:**



Después de la puesta en marcha de la directiva Europea 2002/96/EU y 2006/66/EU en el sistema legislativo nacional, se aplicara lo siguiente: Los aparatos eléctricos y electrónicos, así como las baterías, no se deben evacuar en la basura doméstica. El usuario está legalmente obligado a llevar los aparatos eléctricos y electrónicos, así como pilas y pilas recargables, al final de su vida útil a los puntos de recogida comunales o a devolverlos al lugar donde los adquirió. Los detalles quedaran definidos por la ley de cada país. El símbolo en el producto, en las instrucciones de uso o en el embalaje hace referencia a ello. Gracias al reciclaje, al reciclar del material o a otras formas de reciclaje de aparatos/pilas usados, contribuye Usted de forma importante a la protección de nuestro medio ambiente.

### **(NL) Notitie aangaande de bescherming van het milieu:**



Ten gevolge van de invoering van de Europese Richtlijn 2002/96/EU en 2006/66/EU in het nationaal juridisch system, is het volgende van toepassing: Elektrische en elektronische apparatuur, zoals batterijen mag niet met het huisvuil weggegooid worden. Consumenten zijn wettelijk verplicht om elektrische en elektronische apparaten zoals batterijen op het einde van gebruik in te dienen bij openbare verzamelplaatsen speciaal opgezet voor dit doelende of bij een verkooppunt. Verdere specificaties aangaande dit onderwerp zijn omschreven door de nationale wet van het betreffende land. Dit symbol op het product, de gebruiksaanwijzing of de verpakking duidt erop dat het product onderworpen is aan deze richtlijnen. Door te recyclen, hergebruiken van materialen of andere vormen van hergebruiken van oude toestellen/batterijen, levert u een grote bijdrage aan de bescherming van het milieu.

### **(I) Informazioni per protezione ambientale:**



Dopo l'implementazione della Direttiva Europea 2002/96/EU e 2006/66/EU nel sistema legale nazionale, ci sono le seguenti applicazioni: Le apparecchiature elettriche ed elettroniche e le batterie non devono essere smaltite con i rifiuti domestici. I consumatori sono obbligati dalla legge a restituire i dispositivi elettrici ed elettronici e le batterie alla fine della loro vita utile ai punti di raccolta pubblici preposti per questo scopo o nei punti vendita. Dettagli di quanto riportato sono definiti dalle leggi nazionali di ogni stato. Questo simbolo sul prodotto, sul manuale d'istruzioni o sull'imballo indicano che questo prodotto è soggetto a queste regole. Riciclando, ri-utilizzando i materiali o utilizzando sotto altra forma i vecchi prodotti/le batterie, darete un importante contributo alla protezione dell'ambiente.

### **(GR) Υπόδειξη σχετική με την προστασία περιβάλλοντος:**



Από τη στιγμή που η Ευρωπαϊκή Οδηγία 2002/96/EE και 2006/66/EE ενσωματώνεται στο εθνικό δίκαιο ισχύουν τα εξής: Οι ηλεκτρικές και οι ηλεκτρονικές συσκευές καθώς και οι μπαταρίες δεν επιτρέπεται να πετιούνται στα οικιακά απορρίμματα. Οι καταναλωτές υποχρεούνται από τον νόμο να επιστρέφουν τις ηλεκτρικές και ηλεκτρονικές συσκευές καθώς και τις μπαταρίες στο τέλος της ζωής τους στα δημόσια σημεία περισυλλογής που έχουν δημιουργηθεί γι' αυτό το σκοπό ή στα σημεία πώλησης. Οι λεπτομέρειες ρυθμίζονται στη σχετική νομοθεσία. Το σύμβολο πάνω στο προϊόν, στο εγχειρίδιο χρήσης ή στη συσκευασία παραπέμπει σε αυτές τις διατάξεις. Με την ανακύκλωση, επαναχρησιμοποίηση των υλικών ή με άλλες μορφές χρησιμοποίησης παλιών συσκευών / Μπαταριών συνεισφέρετε σημαντικά στην προστασία του περιβάλλοντος. Στη Γερμανία ισχύουν αντίστοιχα οι παραπάνω κανόνες απόρριψης σύμφωνα με τον κανονισμό για μπαταρίες και συσσωρευτές.

### **(S) Not om miljöskydd:**



Efter implementeringen av EU direktiv 2002/96/EU och 2006/66/EU i den nationella lagstiftningen, gäller följande: Elektriska och elektroniska apparater samt batterier får inte kastas i hushållsoporna. Konsumenter är skyldiga att återlämna elektriska och elektroniska apparater samt batterier vid slutet av dess livslängd till, för detta ändamål, offentlig uppsamlingsplats. Detaljer för detta definieras via den nationella lagstiftningen i respektive land. Denna symbol på produkten, instruktionsmanualen eller på förpackningen indikerar att produkten infettas av denna bestämmelse. Genom återvinning och återanvändning av material/batterier bidrar du till att skydda miljön och din omgivning.

### **(FIN) Ympäristönsuojelua koskeva ohje:**



Siitä lähtien, kun Euroopan unionin direktiivi 2002/96/EU ja 2006/66/EU otetaan käyttöön kansallisessa lainsäädännössä, pätevät seuraavat määräykset: Sähkö- ja elektronikkalaitteita ja paristoja ei saa hävittää talousjätteen mukana. Kuluttajalla on lain mukaan velvollisuus toimittaa sähkö- ja elektronikkalaitteet niiden käyttöön päätyttyä niille varattuihin julkisiin keräyspisteisiin tai palauttaa ne myyntipaikkaan. Tähän liittyvistä yksityiskohdista säädetään kulloisenkin osavaltion laissa. Näistä määräyksistä mainitaan myös tuotteen symbolissa, käyttöohjeessa tai pakkauskassissa. Uudelleen-käytöllä, materiaalien/paristojen uudelleenkäytöllä tai muilla vanhojen laitteiden uudelleenkäyttövoilla on tärkeä vaikutus yhteisen ympäristömme suojelussa.



### **PL** Wskazówki dotyczące ochrony środowiska:

Od czasu wprowadzenia europejskiej dyrektywy 2002/96/EU i 2006/66/EU do prawa narodowego obowiązują następujące ustalenia: Urządzeń elektrycznych, elektronicznych oraz baterii jednorazowych nie należy wyrzucać razem z codziennymi odpadami domowymi! Użytkownik zobowiązany prawnie do odniesienia zepsutych, zniszczonych lub niepotrzebnych urządzeń elektrycznych i elektronicznych do punktu zbiórki lub do sprzedawcy. Szczegółowe kwestie regulują przepisy prawne danego kraju. Informuje o tym symbol przekreślonego kosza umieszczony na opakowaniu. Segregując odpady pomagasz chronić środowisko!



### **H** Környezetvédelmi tudnivalók:

Az európai irányelvek 2002/96/EU és 2006/66/EU ajánlása szerint, a megjelölt időponttól kezdve, minden EU-s tagállamban érvényesek a következők: Az elektromos és elektronikai készülékeket és az elemeket nem szabad a háztartási szeméthez dobni. A leselejtezett elektromos és elektronikus készülékeket és elemeket, akkumulátorokat nem szabad a háztartási szeméthez dobni. Az elhasznált és működésképtelen elektromos és elektronikus készülékek gyűjtésére törvényi előírás kötelez mindenkit, ezért azokat el kell szállítani egy kijelölt gyűjtő helyre vagy visszavinni a vásárlás helyére. A termék csomagolásán feltüntetett szimbólum egyértelmű jelzést ad erre vonatkozóan a felhasználónak. A régi készülékek begyűjtése, visszaváltása vagy bármilyen formában történő újra hasznosítása közös hozzájárulás környezetünk védelméhez.



### **CZ** Ochrana životního prostředí:

Evropská směrnice 2002/96/EG a 2006/66/EU ustanovuje následující: Elektrická a elektronická zařízení stejně jako baterie nepatří do domovního odpadu. Spotřebitel se zavazuje odevzdat všechna zařízení a baterie po uplynutí jejich životnosti do příslušných zařízení. Podrobnosti stanoví zákon příslušné země. Symbol na produktu, návod k obsluze nebo balení na toto poukazuje. Recyklací a jinými způsoby využívání přispíváte k ochraně životního prostředí.



### **SK** Ochrana životného prostredia:

Európska smernica 2002/96/EU a 2006/66/EU stanovuje: Elektrické a elektronické zariadenia, rovnako ako batérie sa nesmú vyhadzovať do domáceho odpadu. Spotrebiteľ je zo zákona povinný zlikvidovať elektrické a elektronické zariadenia, rovnako ako batérie na miesta k tomu určené. Symbolizuje to obrázok v návode na použitie, alebo na balení výrobku. Opätovným užitkovanim alebo inou formou recyklácie starých zariadení/batérií prispievate k ochrane životného prostredia.



### **P** Nota em Protecção Ambiental:

Após a implementação da directiva comunitária 2002/96/EU e 2006/66/EU no sistema legal nacional, o seguinte aplica-se: Os aparelhos eléctricos e electrónicos, bem como baterias, não podem ser eliminados juntamente com o lixo doméstico. Consumidores estão obrigados por lei a colocar os aparelhos eléctricos e electrónicos, bem como baterias, sem uso em locais públicos específicos para este efeito ou no ponto de venda. Os detalhes para este processo são definidos por lei pelos respectivos países. Este símbolo no produto, o manual de instruções ou a embalagem indicam que o produto está sujeito a estes regulamentos. Reciclando, reutilizando os materiais dos seus velhos aparelhos/baterias, esta a fazer uma enorme contribuição para a protecção do ambiente.



### **RUS** Охрана окружающей среды:

С момента перехода национального законодательства на европейские нормы 2002/96/EU и 2006/66/EU действительно следующее: Электрические и электронные приборы, а также батареи запрещается утилизировать с обычным мусором. Потребитель, согласно закону, обязан утилизировать электрические и электронные приборы, а также батареи и аккумуляторы после их использования в специально предназначенных для этого пунктах сбора, либо в пунктах продажи. Детальная регламентация этих требований осуществляется соответствующими местным законодательством. Необходимость соблюдения данных предписаний обозначается особым значком на изделии, инструкции по эксплуатации или упаковке. При переработке, повторном использовании материалов или при другой форме утилизации бывших в употреблении приборов Вы помогаете охране окружающей среды. В соответствии с предписаниями по обращению с батареями, в Германии вышеназванные нормы действуют для утилизации батарей и аккумуляторов.



### **TR** Çevre koruma uyarısı:

Avrupa Birliği Direktifi 2002/96/EU ve 2006/66/EU ulusal yasal uygulamalar için de geçerli olduğu tarihten itibaren: Elektrikli ve elektronik cihazlarla piller normal evsel çöpe atılmamalıdır. Tüketiciler için, artık çalışmayan elektrikli ve elektronik cihazları piller, kamuya ait toplama yerlerine götürme veya satın alındıkları yerlere geri verme yasal bir zorunluluktur. Bu konu ile ilgili ayrıntılar ulusal yasalarla düzenlenmektedir. Ürün üzerinde, kullanma kılavuzunda veya ambalajda bulunan bu sembol tüketiciyi bu konuda uyarır. Eski cihazların geri kazanımı, yapıldıkları malzemelerin değerlendirilmesi veya diğer değerlendirme şekilleri ile, çevre korumasına önemli bir katkıda bulunursunuz. Yukarıda adı geçen atık toplama kuralları Almanya'da piller ve aküler için de geçerlidir.



### **RO** Instrucțiuni pentru protecția mediului înconjurător:

Din momentul aplicării directivelor europene 2002/96/UE în dreptul național sunt valabile următoarele: Aparatele electrice și electronice nu pot fi salubritate cu gunoial menajer. Consumatorul este obligat conform legii să predea aparatele electrice și electronice la sfârșitul duratei de utilizare la locurile de colectare publice sau înapoi de unde a fost cumpărate. Detaliile sunt reglementate de către legislația țării respective. Simbolul de pe produs, în instrucțiunile de utilizare sau pe ambalaj indică aceste reglementări. Prin reciclarea, revalorificarea materialelor sau alte forme de valorificare a aparatelor scoase din uz aduceți o contribuție importantă la protecția mediului nostru înconjurător.



### **DK** Anvisninger til beskyttelse af miljøet:

Fra og med indførelsen af EU-direktiverne 2002/96/EF og 2006/66/EF i national ret gælder følgende: Elektrisk og elektronisk udstyr samt batterier må ikke bortskaffes sammen med almindeligt husholdningsaffald. Forbrugeren er lovmæssigt forpligtet til at aflevere udtjent elektrisk og elektronisk udstyr samt batterier til dertil indrettede, offentlige indsamlingssteder eller til forhandleren. De nærmere bestemmelser vedr. dette fastlægges af lovgivningen i det pågældende land. Symbolet på produktet, brugsvejledningen eller emballagen henviser til disse bestemmelser. Ved genbrug, genvinding eller andre former for nyttiggørelse af udtjent udstyr/batterier giver du et vigtigt bidrag til beskyttelse af miljøet.



### **N** Informasjon om beskyttelse av miljøet:

Fra tidspunktet for omsetning av de europeiske direktivene 2002/96/EF og 2006/66/EF i nasjonal rett gjelder følgende: Elektriske og elektroniske apparater og batterier må ikke deponeres sammen med husholdningsavfallet. Forbrukeren er lovmessig forpliktet til å levere elektriske og elektroniske apparater og batterier til de offentlige samlestedene eller tilbake til stedet hvor produktene ble kjøpt. Detaljer angående dette reguleres av hvert land. Symbolet på produktet, bruksanvisningen eller emballagen henviser om disse bestemmelsene. Med resirkulering, gjenbruk av stoffer eller andre former av gjenbruk av gamle apparater/batterier bidrar du betydelig til å beskytte miljøet vårt.

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