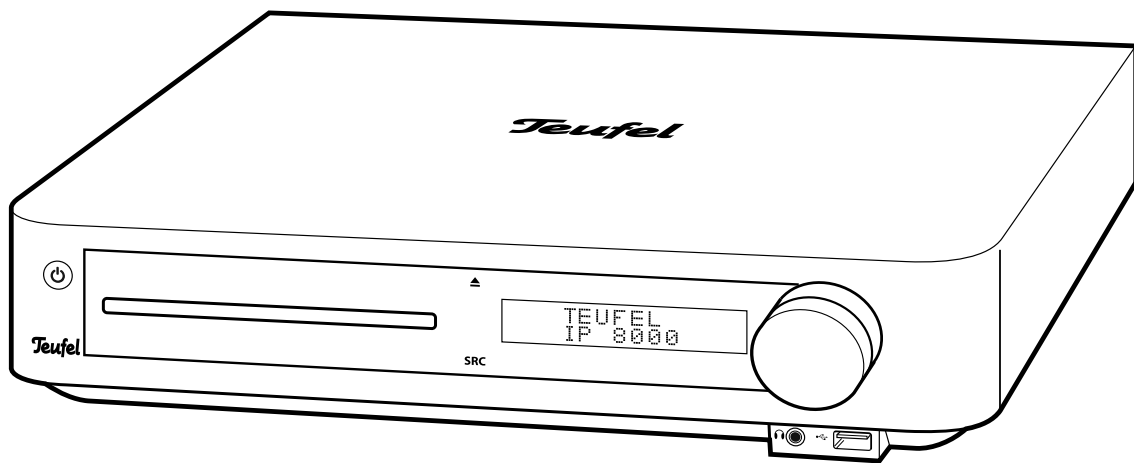


Technical Description and User Manual



Impaq 8000

7.1 AV receiver with 3D Blu-ray player

Teufel

Contents

General notes and information	3	My media	20
Notice	3	Main menu “My media”.....	20
Trademarks	3	Main menu “Settings”	21
Cinavia notice	3	Menu “Video setup”.....	21
Software licenses	4	Settings	21
Original packaging.....	4	Menu “Speaker settings”	22
Complaints.....	4	Menü “Audio setup”.....	22
Proper use.....	4	Menu “Audio mapping”	23
For your safety	5	Menu “Language”.....	23
Signal terms.....	5	Menu “Network”	23
Safety notes	5	Menu “Wireless”	24
Warning of damage to property.....	6	Menu “System”	25
Explanation of symbols	7	Menu “Security”.....	26
Overview	8	Main menu “Sound”	27
Unpacking	8	Source	28
Pack contents	8	Main menu “Source”	28
Checking the pack contents.....	8	Radio Mode	29
Operational controls and connections	9	Setting the radio stations.....	29
Front side	9	Station memory	30
Back side.....	9	Bluetooth® mode	31
Remote control	10	Playback.....	32
Inserting batteries	11	BD/DVD/CD mode	33
Functionality.....	11	Suitable BDs/DVDs/CDs	33
Setup	12	Disc playback.....	33
Setup location	12	Ejecting the disc.....	34
Setting up the speakers	12	USB Mode	35
Connecting the speakers	13	Connecting and playing back a USB device ...	35
Pre Out.....	13	Removing the USB device	35
Connecting	13	DLNA mode	36
TV set.....	14	Playback functions	37
Headphones.....	14	General playback information.....	37
Inputs for source devices.....	14	BD and DVD playback.....	37
FM/USW antenna.....	15	Display information	38
Network/Internet.....	15	Video playback menu	38
Mains connection	15	Repeat function	39
Basic functions	16	Search	39
Sensor buttons	16	File selection	40
Activating and deactivating.....	16	Video playback.....	40
Selecting a source	16	Music playback	40
Adjusting the volume.....	17	Photo playback	41
Adjusting the sound.....	17	AVCHD playback	42
Surround mode selection.....	17	Care and Cleaning	43
Setting the audio delay.....	18	Troubleshooting	44
Adjusting the channel level	18	Technical data	50
Main menu	19	Declaration of Conformity	50

General notes and information

Notice

The information in this document may change without prior notice and in no way constitutes any liability on the part of Lautsprecher Teufel GmbH.

No part of this user manual may be reproduced in any form or be broadcasted in any way electronically, mechanically, by photocopy or recording without the written permission of Lautsprecher Teufel GmbH.

© Lautsprecher Teufel GmbH

Version 3.0

September 2020


Trademarks

® All trademarks are the property of their respective owners.

Qualcomm® aptX™ 

Qualcomm aptX is a product of Qualcomm Technologies International, Ltd.

Qualcomm is a trademark of Qualcomm Incorporated, which is registered in the USA and other countries; its use has been approved. aptX is a trademark of Qualcomm Technologies International, Ltd., which is registered in the USA and other countries; its use has been approved.

 **Bluetooth®** Bluetooth® and the Bluetooth® symbol are trademarks of Bluetooth SIG, Inc.

DivX⁺ HD This DivX Certified® device has undergone stringent tests to ensure that it is capable of playing DivX® videos.

Register the device on vod.divx.com to be able to play DivX® videos you bought. You can find your registration code by selecting the menu item “DivX® VOD” in the menu “Settings; system”.

DivX Certified® for the playback of DivX® and DivX Plus® HD (H.264/MKV) videos of up to 1080p HD including premium content.

DivX®, DivX Certified® DivX Plus® HD and corresponding logos are trademarks of DivX, LLC and are used under license.

Protected by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 8,301,793; 8,656,183; 8,731,369; 8,942,548; 8,997,161; RE45,052.

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE The HDMI and High-Definition Multimedia Interface symbols as well as the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the USA and other countries.

Blu-ray 3D™

Blu-ray 3D is a trademark of the Blu-ray Disc Association.


BD LIVE

BD LIVE is a trademark of the Blu-ray Disc Association.

dts-HD® Master Audio | Essential

You can find all DTS patents under <http://patents.dts.com>. Manufactured under license from DTS Licensing Limited. DTS-HD, the symbol as well as DTS-HD together with the symbol are registered trademarks and DTS-HD Master Audio | Essential are a trademark of DTS, Inc. The product contains software. © DTS, Inc. All rights reserved.

DOLBY AUDIO™ Manufactured under license from Dolby Laboratories. “Dolby”, “Pro Logic” and the double D symbol are trademarks of Dolby Laboratories

 The “N-Mark” symbol is a trademark or registered trademark of NFC Forum, Inc. in the USA and other countries.

Cinavia notice

This device uses Cinavia technology to prevent making pirate copies of commercially produced films and videos as well as their soundtracks. If a pirate copy is detected on a device, a corresponding message appears on the screen and play back or the copying process is stopped.

More information on Cinavia technology is available on the Cinavia Online Consumer Information Center at <http://www.cinavia.com>. For more information on Cinavia by post, send a post card with your address to:

Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA.

Copyright 2004-2013 Verance Corporation. Cinavia™ is a trademark of the Verance Corporation. Protected by U.S. Patent 7,369,677 and globally valid patents, issued and registered under licence from the Verance Corporation. All Rights Reserved.

Software licenses

This product contains open source software, which, among others, is licensed under GNU General Public License (GPL).

Detailed information, license texts and all other relevant statements of the open source software used are stored inside this device and can be viewed in the system menu: Please call up menu entry Settings-> System-> License Information->

Original packaging

If you wish to exercise your eight-week right of return, we ask that you be absolutely sure to hold onto the packaging. We can only accept the return of the device WITH THE ORIGINAL PACKAGING.

Empty boxes are not available!

Complaints

In case of a complaint we will need the following information to process your enquiry:

1. Invoice number

Can be found on the sales slip (enclosed with the product) or on the order confirmation received as a PDF document, e.g. 4322543

2. Serial number or batch number

Located on the back side of the device, e.g. serial no.: KB20240129A-123.

Thank you for your support!

Contact

Please contact our customer service with any questions, suggestions or criticism:

Lautsprecher Teufel GmbH

BIKINI Berlin

Budapester Str. 44

10787 Berlin (Germany)

Phone 00800 - 200 300 40 (toll-free)

Fax: +49 (0)30 / 300 930 930

Service: www.teufelaudio.com/service

Contact: www.teufelaudio.com/contact

Proper use

The Impaq 8000 is designed for the playback of music and speech from the built-in Blu-ray player, the built-in FM radio or an external player and for the playback of digital videos via a TV set.

Only use the Impaq 8000 as described in this user manual. Any other use will be deemed as not in accordance with the instructions and may lead to damage of property or even persons.

The manufacturer accepts no liability for damage caused by improper use.

The Impaq 8000 is intended for private use only.



Before operating the Impaq 8000, please first read the safety notes and user manual carefully. Only in this way, can you ensure that all functions are used in a safe and reliable manner. Store the user manual in a safe place and also be sure to pass it on to any subsequent owner.

NOTICE

Check that all items have been delivered and that nothing is damaged. If damaged, do not operate the product, but contact our service team.

Signal terms

You can find the following signal terms in this user manual:

WARNING

This signal term indicates a moderate risk, which, if not avoided, may result in death or severe injury.

CAUTION

This signal term indicates a low risk, which, if not avoided, may result in minor or moderate injury.

NOTICE

This signal term warns you of potential damage.

Safety notes

This chapter contains general safety notes which you should always observe to protect yourself and third parties. Also observe the warning notes in each chapter of this user manual.

Improper electrical installation or excessive mains voltage may result in an electrical shock.

- The device is suitable for a mains voltage of 230V~ / 50Hz. When connecting the device, make sure that the correct voltage is present. You can find more information about this on the rating plate.
- Check the device regularly for damage. Immediately disconnect the mains plug and do not operate the device if its housing or mains cord is defective or exhibits other visible damages.
- This device is disconnected from the grid by pulling the mains plug. Thus, make sure that the mains plug is always easily accessible.
- If the device emits smoke, smells burnt or produces unusual sounds, immediately disconnect it from the mains and do not operate it further.
- Never open the device housing. Repairs may only be carried out by an authorised specialist workshop. Only parts that match the original specifications may be used.
- Only use the accessory products specified by the manufacturer.

- Only use the device indoors.
- Do not operate the device in wet rooms and protect it from dripping and splashing water. Make sure that no vases or other liquid-filled objects are located on or near the device in order to prevent liquid from penetrating the housing. If water or other foreign objects should enter the unit, immediately disconnect the mains plug. Then send the device to our service address.
- Never modify the device. Unauthorised modifications may affect the safety and functionality.
- Never touch the mains plug with wet hands.

An unsuitable setup location may result in injury and damage.

- Never use the device unmounted in vehicles, in unstable locations, on wobbly tripods or furniture, on insufficiently dimensioned brackets etc. The device could tip or fall down and cause injury to persons or be damaged itself.
- Place the connected speakers in such a way that they cannot be knocked over inadvertently and make sure that the cables do not pose a trip hazard.
- Do not place the device near heat sources (e.g. heaters, ovens, other heat generating equipment such as amplifiers etc.).
- Do not use the device in environments where there is a risk of explosion.
- Only use the Bluetooth® function in locations where wireless radio transmission is allowed.
- When storing the product, also ensure that it stands safely and that it cannot be knocked down or over.

Children can become trapped in the plastic wrapping when playing and suffocate.

- Do not allow children to play with the device or the plastic wrapping. There is a danger of suffocation.
- Ensure that children do not remove small parts from the device or take them off of the device (e.g. control knobs or plug adapters). They could swallow the parts and choke.
- Never allow children to operate electrical equipment unsupervised.

Leaking battery acid may lead to chemical burns.

- Store both new and used batteries so that they are not accessible to children.
- Do not allow battery acid to come into contact with skin, eyes or mucous membranes. In the event of contact with battery acid, immediately flush the applicable areas with plenty of clean water and consult a physician if necessary.

Batteries (particularly lithium batteries) can explode if used improperly.

- Never attempt to recharge batteries.
- Only use batteries of the same or equivalent type.
- You must not heat or short circuit batteries and rechargeable batteries or dispose of them in fire.
- Do not expose batteries and rechargeable batteries to direct sunlight.



Extended listening at high volumes may lead to hearing loss.

To avoid damage to health, avoid extended listening at high volumes.

- When the volume is set high, always keep a certain distance from the device and never place your ear directly on the speaker.
- If a speaker is set to full volume, this may produce very high sound pressure. This may have psychological consequences and also cause physical injury. Children and pets are particularly at risk. Set your signal source device volume control to a low setting before turning on the power.



Operating the device when the housing is open will cause an invisible or visible laser beam to be emitted.

- Do not look into the beam, even if you are using optical instruments.

This product contains magnetic material.

- If necessary, consult your physician and ask for effects on implants such as pacemakers or defibrillators.

Warning of damage to property

NOTICE




If the device is subjected to warm temperatures after being cold (e.g. after transport), condensation may occur inside of it.



- *In this case, wait at least 2 hours before you connect and activate it.*

Improper use may lead to damage or fire.

- *Do not place open flames such as burning candles or similar on the device.*
- *Ensure sufficient ventilation.*
- *Do not place the device in direct sunlight.*
- *Only use the device in indoor areas.*

Explanation of symbols

	Protection class II Dual insulation
	Risk of electrical shock – do not open the housing. Disconnect the mains cord before changing a fuse.
	Fuse 6.3 AL/250 V

	<p>Old devices must not be disposed of with household waste!</p> <p>If the device is no longer operational, every consumer is required by law to dispose of old devices separately from household waste, e.g. at a collection point run by the communal authority/borough. This ensures that old devices are recycled in a professional manner and also rules out negative consequences for the environment.</p> <p>For this reason, electrical equipment is marked with the adjacent symbol.</p>
	<p>Batteries and rechargeable batteries do not belong in the household garbage!</p> <p>Every consumer is required by law to bring all batteries and rechargeable batteries, regardless whether they contain harmful substances*) or not, to a collection point run by the communal authority or borough or to a retailer, so that they can be disposed of in an environmentally friendly manner.</p> <p>Please only turn in batteries and rechargeable batteries which are empty!</p> <p>*) labelled with: Cd = cadmium, Hg = mercury, Pb = lead</p>

Overview

Unpacking

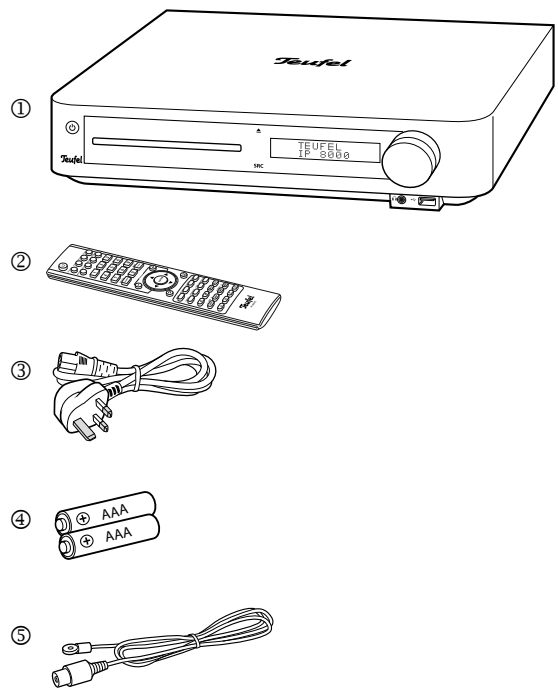
- Carefully open the box and carefully lift the device and accessories out of the box.

Pack contents

- ① 1 × AV receiver Impaq 8000
- ② 1 × remote control IP 8000 RC
- ③ 1 × mains cord for the AV receiver
- ④ 2 × AAA battery for the remote control
- ⑤ 1 × throw-out FM antenna

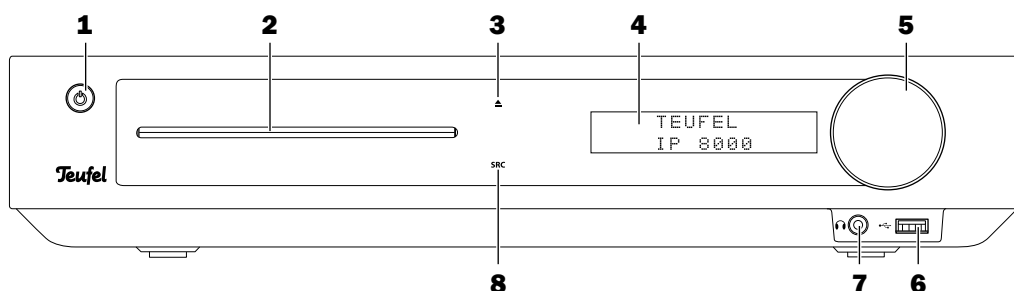
Checking the pack contents

- Check that all items have been delivered and that nothing is damaged.
- If the delivery is incomplete or the device has been damaged, please contact our customer service department (see page 3).
- Do not in any case operate the device if it is damaged.



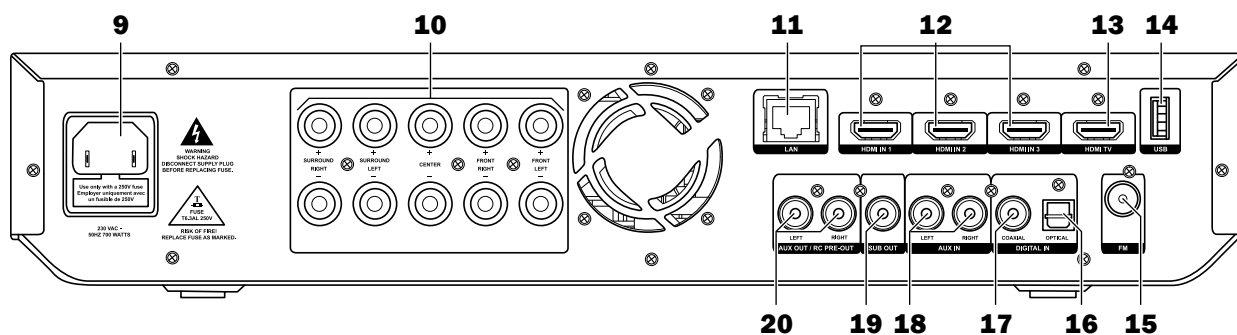
Operational controls and connections

Front side



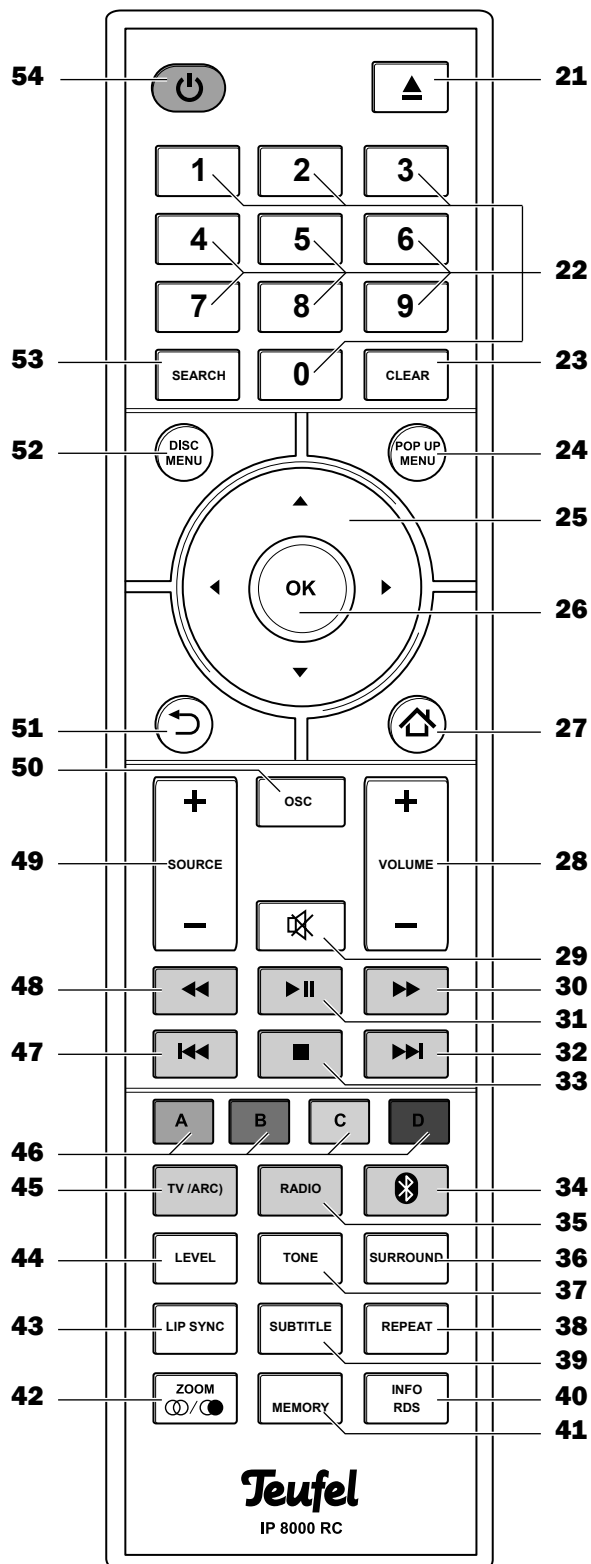
Item	Name	Description	Item	Name	Description
1	⏻	Turning the device on/off	6	—	USB port
2	—	Disc slot	7	—	Headphone jack
3	⏪	Ejecting the disc	8	SRC	Selecting a source (HDMI 1–3, TV, BT, TUNER, COAXIAL, OPTICAL, AUX, DISC)
4	—	Display			
5	—	Control dial for the volume and source, push to mute and select source			

Back side



Item	Name	Description	Item	Name	Description
9	—	Connector jack for mains cord	16	DIGITAL IN OPTICAL	Input jack for digital audio signals via optical lines (TOSLINK)
10	—	Speaker terminals	17	DIGITAL IN COAXIAL	Input jack for digital audio signals via a Coax cable
11	LAN	Network connection	18	AUX IN	Input jacks for analogue audio source devices
12	HDMI 1/2/3	HDMI input jacks for digital source devices	19	SUB OUT	Output jack for active subwoofer
13	HDMI TV	HDMI output jack for TV set	20	RC PRE OUT	Analogue audio output jacks
14	USB	USB port			
15	FM	Antenna connection			

Remote control



Item	Name	Description
21		Ejecting the disc
22	1...0	Number buttons
23	CLEAR	Delete button
24	POP UP MENU	Accessing the pop up menu
25		Navigation up, right, down, left
26	OK	Selector button
27		Accessing the main menu
28	VOLUME +/-	Increasing/decreasing the volume
29		Switching speakers to mute
30		Video: fast forward Radio: increasing the frequency
31		Playback/pause
32		Audio/video: Skip ahead Radio: next station in memory
33		Stopping playback
34		Bluetooth® as source, long press: pairing
35	RADIO	Selecting "FM" radio (VHF)
36	SURROUND	Surround settings
37	TONE	Adjusting the sound
38	REPEAT	Adjusting repeat
39	SUBTITLE	Video: selecting subtitles
40	INFO/RDS	Video: additional indicator Radio: RDS information
41	MEMORY	Radio: save station to memory
42	ZOOM	Video: zoom function
		Radio: stereo/mono switching
43	LIP SYNC	Video: setting the audio delay
44	LEVEL	Setting the channel volume
45	TV (ARC)	Selecting TV as audio source
46	A, B, C, D	Control buttons for BD programs
47		Audio/video: skip back Radio: previous station in memory
48		Video: fast rewind Radio: decreasing frequency
49	SOURCE +/-	Selecting a source
50	OSC	Displaying the control options
51		Skip back/exit the menu
52	DISC MENU	Accessing the BD/DVD menu
53	SEARCH	Video: selecting the title, chapter, time Radio: auto store station
54		Turning the device on/off

CAUTION

Leaking battery acid may lead to chemical burns.

- Store both new and used batteries so that they are not accessible to children.
- Do not allow battery acid to come into contact with skin, eyes or mucus membranes. In the event of contact with battery acid, immediately flush the applicable areas with plenty of clean water and consult a physician if necessary.

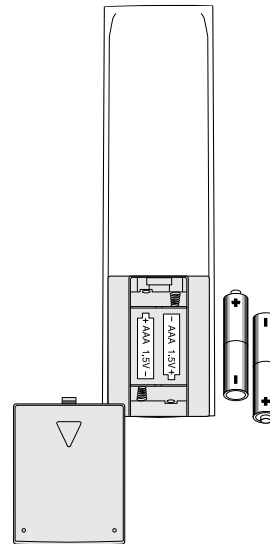
Batteries (particularly lithium batteries) can explode if used improperly.

- Never attempt to recharge batteries.
- Only use batteries of the same or equivalent type.
- Never heat or short circuit batteries and rechargeable batteries, or dispose of them in fire.
- Do not expose batteries and rechargeable batteries to direct sunlight.

In order to operate the remote control, you will need two type AAA or micro batteries with 1.5 Volt (included in the pack contents).

You should change the batteries if the remote control stops working properly or after 2 years at the latest.

Inserting batteries



1. Gently depress the arrow on the battery compartment cover on the back side of the remote control. Push the cover down and out. Remove the cover.
2. If applicable, remove any old batteries (please observe the disposal notes on page 7).
3. Insert the new batteries according to the image on the battery compartment; make sure the polarity is correct.
4. Place the cover back on the compartment and push it closed.

Functionality

The remote control relays the control signals by means of infrared light. For this, you will have to point the front side of the remote control towards the Impaq 8000. Make sure that the infrared light is not obstructed by objects.

Fluorescent lamps and energy-saving lamps installed in the direct vicinity may affect the functions of the remote control or impair them.

Setup

Setup location

NOTICE

If the device is subjected to warm temperatures after being cold (e.g. after transport), condensation may occur inside of it.

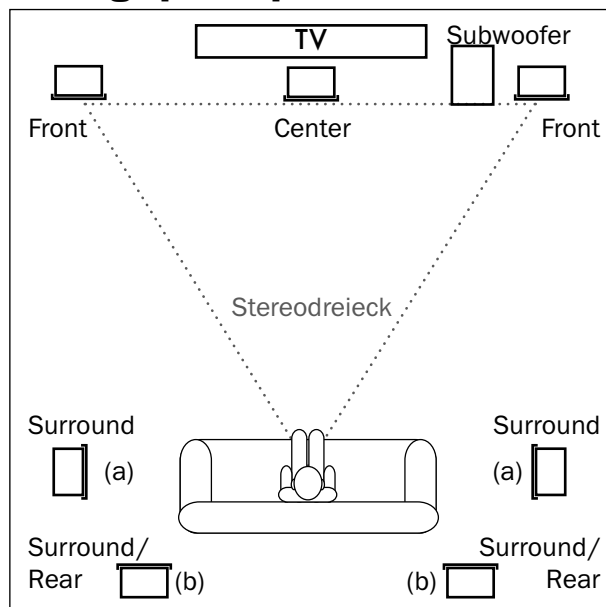
– In this case, wait at least 2 hours before you connect and activate it.

i You can find extensive information describing correct setup on our website.

Location tips

- Select a stable, level base.
- Make sure that the environment is clean and free from dust.
- Select a location away from heat sources and direct sunlight.
- The device should have approx. 10 cm of clearance on all sides to ensure adequate circulation of air.
- Lay the connector cords so that they do not pose a tripping hazard.
- Do not place any heavy objects on the cable or the devices.

Setting up the speakers



Center speaker

Place the center speaker in a central position directly under the screen or ideally on a circular arc that is slightly curved towards the screen. You can also mount some speaker models directly on the wall using the keyhole opening on the rear panel.

Front speakers

The front speakers are set up or hung to the right and left of the screen.

The speakers should be in line with the center speaker and form an equilateral triangle with the listener – the so-called stereo triangle (distance from the listener = distance between the speakers).

The speakers should project sound directly into the room or slightly towards the listener.

Surround speakers

The surround speakers are setup or hung to the side (a) or back (b) of the listener at a height of 1.20 m to 2.10 m.

There should be at least 100 cm distance to the listener.

Subwoofer

The location of the subwoofer can be freely selected and does not influence the other speakers. However, do not set it up in the corner of the room as this may result in uncontrollable frequency rises. A location between the front speakers is often ideal.

Rear speakers

To set up a 7.1 system, the Impaq 8000 can emit the rear channels via the jacks **(20) RC PRE OUT**. You can connect an external stereo amplifier, active speaker or radio system to it. Then the speakers are mounted behind (b) or above the viewers.

Connecting the speakers

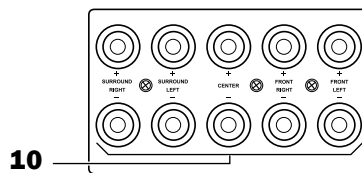
NOTICE

Risk of damage!

– Do not connect the device to the mains yet.

Use the highest quality of speaker cords possible with a cross-section of at least 1.5 mm² to connect to the speakers. You can order this type of cables in our webshop (www.teufelaudio.com) in the “Accessories” area.

The connector terminals (10) for the five speakers are located on the back side of the receiver:



Speaker	Label
Surround right	SURROUND RIGHT
Surround left	SURROUND LEFT
Center	CENTER
Front right	FRONT RIGHT
Front left	FRONT LEFT

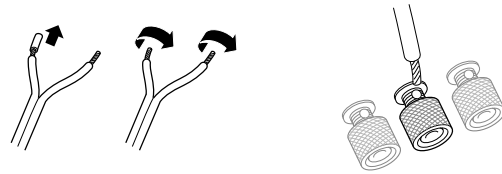
Here you can connect the speaker cables directly or using pin plugs. Only a direct connection is described here.

The terminals are each marked red (+) and black (-).

i Make sure the polarity is correct!

- Connect the like coloured terminals. Otherwise, the sound quality will suffer.
- The strands of the speaker single wire are marked with different colours or shapes.

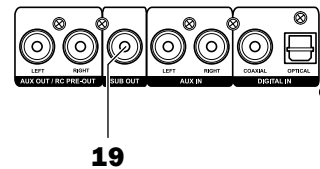
1. Split the speaker cables down to approx. 30 mm on both ends.
2. Remove approx. 10 mm of the insulation on each end.
3. Twist the single wire so that no strands are protruding.



4. Turn the connector terminal (10) counterclockwise until loose.
5. Run the stripped cable end into the now visible hole.
6. Close the terminal by turning it counter-clockwise. The cable has now been clamped in place.

Subwoofer

You can connect an active subwoofer to the **SUB OUT (19)** jack with an RCA cable.

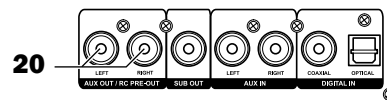


If you use a cordless subwoofer, activate the connection in the “Wireless” menu (see page 24).

Pre Out

You can set the function of the analogue output **RC PRE OUT (20)** in the “Speaker settings” menu (see “Channel configuration” on page 22):

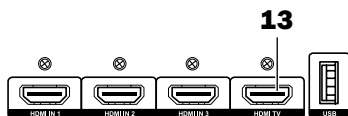
Channel configuration	Function of RC PRE OUT (20)
2.1	Sum of the stereo channels
5.1	Surround channels left/right
7.1	Rear channels left/right



You can connect a power amplifier or active speaker, but also a radio transmission system to these jacks. You will need a stereo cable with RCA plugs to do so.

TV set

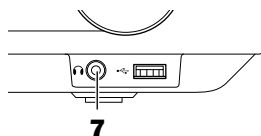
Connect your TV set (e.g. television, projector) with the **HDMI TV (13)** connector. You will need a HDMI cable for this.



If your TV set does not emit audio via HDMI ARC, you can assign one of the audio inputs of the Impaq 8000 to the TV set in the “Audio Mapping” menu (see page 23).

Headphones

You can connect stereo headphones with a 3.5 mm jack plug to the jack (**7**) on the front side.



The speakers and the outputs to the subwoofer (**19**) and to the power amplifiers (**20**) will be automatically deactivated when you connect the headphones.

⚠ CAUTION



Extended listening at high volumes may lead to hearing loss.

– To avoid damage to health, avoid extended listening at high volumes.

Risk of injury/damage!

– Lower the volume before you pull out the headphone plug out again; otherwise, the speakers may emit unexpected high sound pressure. This could injure your

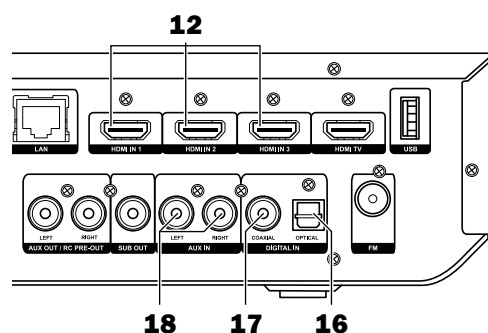
hearing or damage the device.

Inputs for source devices

The receiver offers you three inputs for digital HDMI picture and audio sources (HDMI 1, 2, 3).

An optical and coaxial digital audio input and analogue audio input (AUX IN) are also available.

You can also connect the audio output of your television set – provided that it doesn't support the HDMI ARC feature – to one of these audio inputs in order to listen to audio from the Impaq 8000 for television programmes. See the user manual of your television set for more information.



HDMI 1, 2, 3 (12)

You can connect a source device with a digital picture and audio signal to each of these inputs. You will need a HDMI cable for this.

OPTICAL (16)

You can connect the optical digital audio output of a source device here. You will need an optical cable with a TOSLINK plug for this. Your source device requires either an optical 3.5 mm plug or also a TOSLINK plug.

COAXIAL (17)

You can connect the coaxial digital audio output of a source device here. You will need a coaxial cable with RCA plugs to do so.

AUX IN (18)

You can connect a source device with analogue

audio here. You will need a stereo RCA cable for this (L and R).

FM/USW antenna

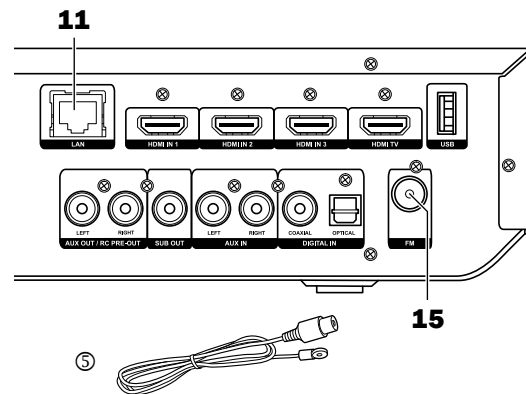
⚠ WARNING

Risk associated with lightning strike!

– If you are using outdoor or roof antennas, be absolutely sure that the antenna system has lightning protection.

To receive FM stations, connect the antenna to the FM jack **(15)**. This may be a roof/outside antenna, but also a cable television connection. You will need a coaxial connector cord for this.

If there is no antenna connection available at the setup location, you can use the throw-out aerial **ⓐ** supplied. Connect the antenna to the **FM (15)** jack and adjust the position of the throw-out aerial for optimal reception. Then fix the loose end with tape or a nail.

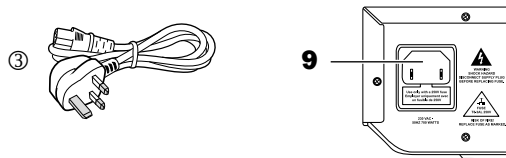


Network/Internet

The Impaq 8000 requires a network connection for Internet-based functions (BD Live), media streaming (DLNA) and program updates. Connect your network or router to the jack **LAN (11)** using a network cable.

Mains connection

1. Make sure that your active subwoofer and/or the active speakers are switched off.
2. Insert the IEC power plug of the mains cord **ⓐ** into the jack **(9)**.
3. Insert the mains plug in a mains power socket (230V~/50Hz).



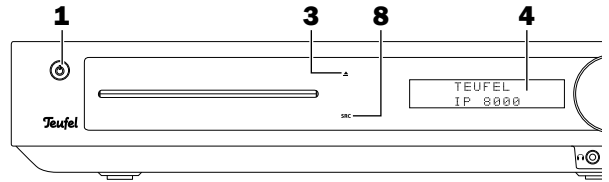
Basic functions

Sensor buttons

The buttons **▲ (3)** and **SRC (8)** on the front side of the Impaq 8000 are illuminated sensor buttons: Lightly touching them will cause them to switch.

Activating and deactivating

- Switch the Impaq 8000 on or to standby with the button **⏻ (1)** or **⏻ (54)**. When in standby, the button **⏻ (1)** will be illuminated in red.
- Standby does not disconnect the device from the mains. Pull the mains plug out of the socket to completely deactivate it.



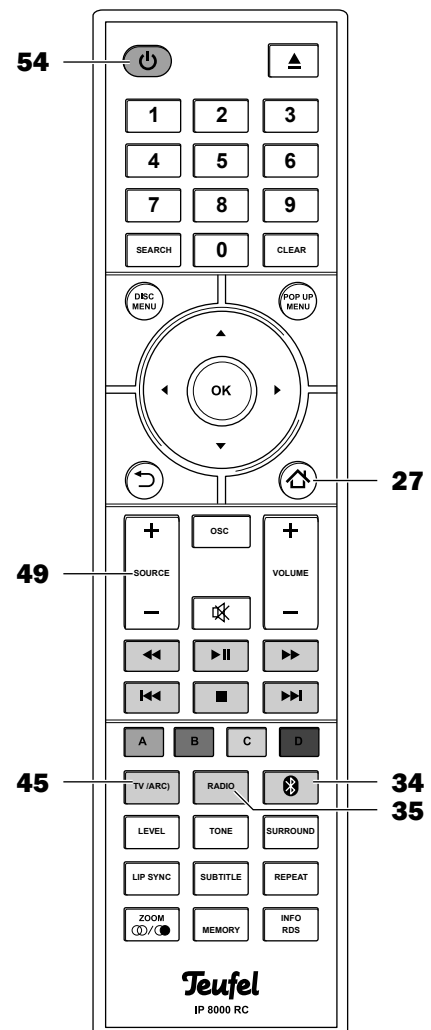
Selecting a source

After turning the device on, the last used source device is selected.

- With the sensor button **SRC (8)**, you can switch the source in the following order:
HDMI 1–3, TV, BT (Bluetooth®), TUNER, COAXIAL, OPTICAL, AUX, DISC
- After pushing the sensor button **SRC (8)**, you can also select the desired source with the control dial **(5)**. Tap the control dial to switch.
- Select the source with the buttons **SOURCE +/- (49)** on the remote control.
- Or switch the source with the direct select buttons:
TV (ARC) (45) – TV audio
RADIO (35) – FM (USW)
BT (34) – BT (Bluetooth®)

The selected source is shown on the display **(4)**.

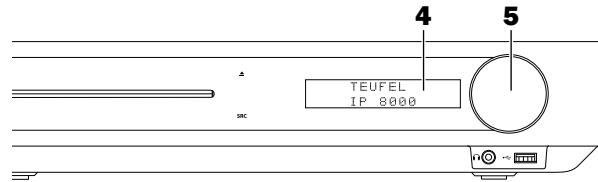
- Playback of BD/DVD/CD, a USB stick or media server (DLNA) is started in the main menu (access with the button **⏪ (27)**) under the item “My media” (see page 20).
- If you insert a CD, DVD or Blu-ray disc, it will start automatically (see page 34).
- You can switch to the audio signal of the TV set with the button **TV ARC (45)**. Prerequisite: The Impaq 8000 is connected to an ARC-capable HDMI input of the TV, the TV’s CEC function (that is, “Viera Link”, “Anynet+”, “Simplink” or “Bravia Synchron”) is activated just like the ARC function of the Impaq 8000 (see page 25).




Adjusting the volume

- Increase the volume: Turn the control dial (5) clockwise or push the **VOLUME + button (28)**.
- Decrease the volume: Turn the control dial (5) counterclockwise or push the **VOLUME – button (28)**.





The display (4) will show the selected volume from 00 to 99.



Mute

- By pushing the control dial (5) or the button  (29) repeatedly, you can turn the sound on and off again.

Adjusting the sound

1. Push the **TONE button (37)**.
“Bass” will appear on the display (4).
2. Select the desired tone range with the navigation buttons   (25):
 - Bass low tones
 - Treble high tones
3. With the navigation buttons   (25) you can adjust the selected range from “–10 dB” (decrease) to “+10 dB” (increase).
When no button is pushed anymore, the original readout will appear again on the display after a few seconds. The new settings have now been saved.

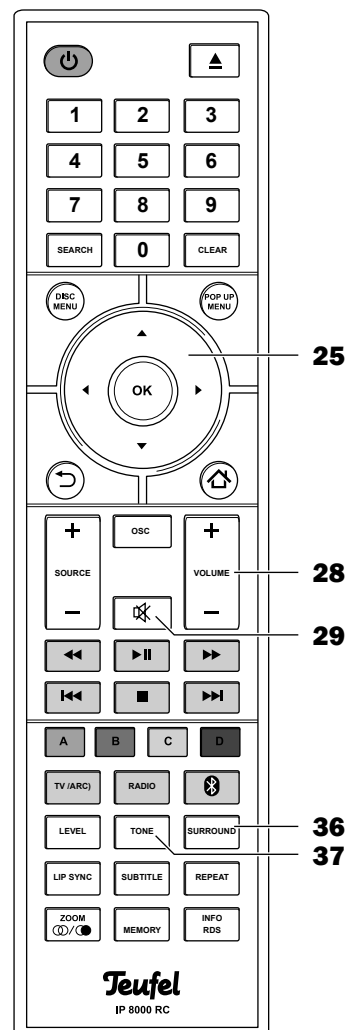
Surround mode selection

Use the **SURROUND button (36)** to toggle the surround mode for stereo sources in this order:

Stereo	Stereo only via front left/right
Stereo (5.1)	Stereo via all channels (upmix)
Dolby PLII Music	Dolby ProLogic II for music
Dolby PLII Movie	Dolby ProLogic IIx for movies

Dolby Digital and DTS

Surround mode is locked for the playback of Dolby Digital or DTS-coded multichannel tracks and so the **SURROUND button (36)** is not functional during playback of such multi-channel streams.



Setting the audio delay

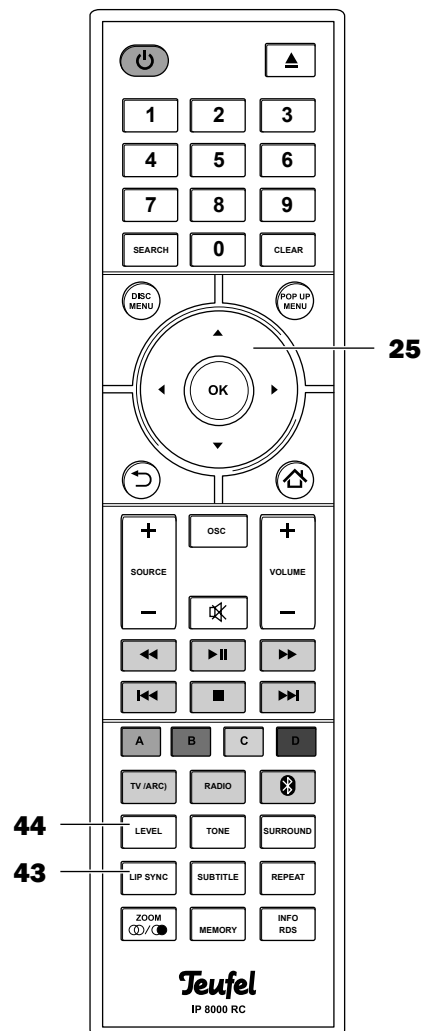
During movie playback, sometimes the image and audio are out of sync. You can use this function to resolve this bothersome effect by configuring the audio delay for certain inputs from 0 to 200 ms.

1. Push the **Lip Sync** button (43). “Lipsync” will appear on the display and an input under it.
2. Select the input with the navigation buttons ◀▶ (25): **HDMI 1, HDMI 2, HDMI 3, DISC, other** (other inputs).
3. With the navigation buttons ▲▼ (25), set the delay between the picture and the audio (0 to 200 ms). Shortly after the last button is pushed, the original readout will appear again on the display. The new settings have now been saved.

Adjusting the channel level

With this function, you can increase or decrease the relative volume for each speaker from “+10 dB” to “-10 dB”.

1. Push the **Level** button (44). “Speaker level” will appear on the display and a channel under it.
2. Select the desired channel with the navigation buttons ◀▶ (25):
 - Subwoofer
 - Front left
 - Center
 - Front right
 - Surr.left
 - Surr.right
 - Rear left
 - Rear right
3. Set the relative volume (-10 dB to +10 dB) with the navigation buttons ▲▼ (25). Shortly after the last button is pushed, the original readout will appear again on the display. The new settings have now been saved.












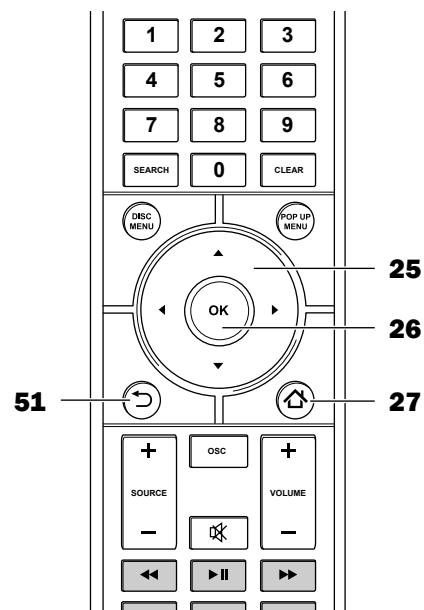
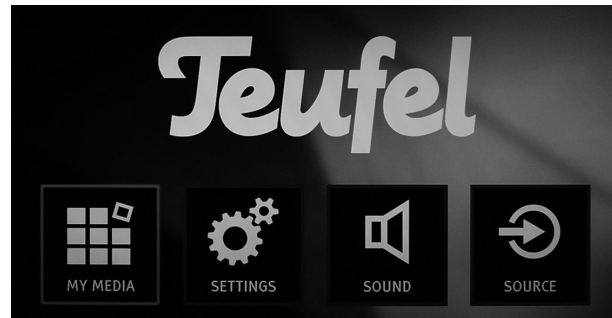
Main menu

Most functions of your Impaq 8000 are configured via the main menu. You can navigate through the menu with the remote control and it will be shown on the connected television set.

Both devices must be turned on in order to view the picture from the receiver on the television set.

How to use the main menu:

1. Push the button  (**27**). The main menu will open.
2. Select the desired menu with the navigation buttons   (**25**) and confirm with the selector button **OK (26)**. The sub-menu will open.
3. Select the desired menu item with the navigation buttons     (**25**) and confirm with the selector button **OK (26)**.
4. You can open other sub-menus in the same manner and make settings.
 - To return to the previous menu, push the button  (**51**) or the navigation button  (**25**).









My media

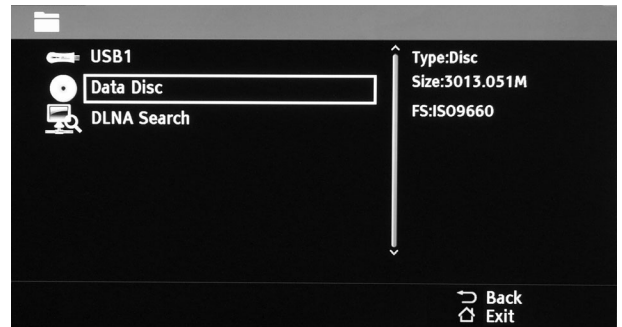
Main menu “My media”

Select data storage devices and servers for playback in this menu:

 USB1, USB2	A USB stick or a USB hard-drive connected to the USB port (see page 35).
 Blu-ray Disc/ DVD video/ CDDA/ DataDisc	A BD, DVD or CD – the designation depends on the type and content of the disc (see page 33).
 DLNA server	DLNA media server connected via a network (see page 36).
 DLNA search	Search the network for DLNA servers (see page 36).

More information on each menu item is displayed on the right side.

After you select a data carrier or server, the available data and folders are shown in a list and can be selected for playback.





Main menu “Settings”

You can configure the settings of the Impaq 8000 here.

Menu “Video setup”

Here you can configure the settings for the connected image playback device (e.g. TV, projector):

“TV aspect ratio”

Configuring the display on the TV set:

- **16:9 normal** – 4:3 movies are displayed with the full height and black bars on the left and right side on a 16:9 TV set, which is optimal as with 16:9 movies.
- **16:9 full screen** – 4:3 movies are displayed with the full height and stretched width on a 16:9 TV set, 16:9 movies are optimally rendered.

“Resolution”

Here you can set the resolution in which the Impaq 8000 supplies all videos and images to the TV set.

Automatic – the highest possible resolution will be automatically selected (also with UHD-TVs).

4K / Ultra HD – only for UHD TVs, which do not display a stable picture in “Automatic” mode (e.g. with Blu-rays). Set the resolution of video output to 4K and scale the video resolution of BD and video files up to 4K.

Full HD – suitable for conventional full HD TVs.

HD ready – suitable for HD Ready TVs.

SD – only suitable for non-HD devices.

After changing the resolution, a window where you have to confirm the new resolution with “OK” appears; otherwise it will switch back to the previous resolution after 15 seconds.

“HDMI colour space”

Adjust the colour playback to your TV set. Please closely follow the user manual for your TV set for this. Possible settings:

- **Automatic** – automatic compensation.
- **YCbCr (also referred to as YUV 4:4:4) – should only be used with corresponding suitable TVs.**
- **YCbCr422** (also referred to as YUV 4:2:2) – ideal for conventional HDMI televisions.
- **Full RGB** – 256 values per colour, for PC monitors.
- **RGB** – values per colour from 16 to 235, for HDMI TV sets, which display unclear colours with another setting.

“HDMI Deep Colour”

“Deep Colour” expands the colour range via HDMI; however, this function cannot be used by all TV sets.

- **Automatic** – automatic setting.
- **Off** – if “Autom” displays incorrect colours.

“HDMI 1080p 24Hz”

Movies are saved on Blu-ray discs with the full resolution and 24 frames/second (1080p24). Not all television sets are capable of rendering such frame rates. Deactivate this option if the picture flickers or stutters excessively. However, Blu-ray discs will stutter slightly at regular intervals in this case.

“HDMI 3D”

Activate and deactivate transmission of three-dimensional movies.



Settings

Menu “Speaker settings”

“Channel configuration”

Here you can specify the channels, which the speakers are connected to. This ensures that the system is able to optimally distribute the audio signal among the speakers.

- **2.1** Only the front speakers on the left/right and subwoofer.
- **5.1** All channels have been assigned speakers.
- **7.1** The (rear) channels are also connected via the output **RC PRE OUT (20)**.

If the configuration is changed, the menu “Speaker size” (see below) will automatically appear.

“Speaker size”

Here you can set the size of the speakers in use for optimal actuation of the speakers. Depending on the setting for “Speaker configuration” (see above), different configurations are available for selection; they are shown as a series of letters/numbers and graphically:

The letters represent the speakers:

Front channels
center
surround channels
rear channels

In this context, S stands for small and L for large speakers.

The end number indicates whether a subwoofer is present (“1”) or not (“0”).

Examples:

- **S1:** 2.1 system, small front speakers with a subwoofer
- **LSS0:** 5.1 system, large front speakers, small center and surround speakers, no subwoofer.
- **LLLL1:** 7.1 system, all large speakers, subwoofer present.

“Crossover frequency”

If you use satellites and subwoofers, you should select the optimal crossover frequency in the Impaq 8000. Otherwise, the sound quality will suffer and the satellites could be damaged.

With the crossover frequency, you define the frequency up to which the subwoofer and satellites should be active. Possible values: 80 to 250 Hz in ten steps.

You can find information on the recommended crossover frequency in the technical data of the respective satellite speakers in our webshop.

“Subwoofer phase”

You can hereby switch the phase shift (180°) on and off for the subwoofer. Select the setting, with which the subwoofer produces the loudest and clearest sound.

Menü “Audio setup”

“HDMI transit”

If you switch to standby from HDMI mode, an HDMI input signal will either be transmitted to the HDMI output or blocked depending on the setting.

- **On** – signal will be transmitted in standby
- **Off** – signal is blocked.

“HDMI audio output”

Switches the audio transmission to the TV set on and off at the HDMI output **HDMI TV (13)**.

When playing back movies, you do not need to mute the television in the “Deactivate” position in order to hear sound from the receiver’s speakers only.

“HDMI output”

Determines the audio output at the HDMI output **HDMI TV (13)**. Possible values:

- **PCM** – The audio signal is mixed to 7.1 and transferred as PCM (normal setting).
- **Bitstream** – Passes on the data stream from the Blu-ray disc unchanged (only for TV sets with Dolby and DTS playback).
- **Bitstream recoding – Passes the data stream of the Blu-ray disc mixed and coded in a single data stream.** Suitable for Dolby TrueHD and DTS-HD Master Audio.

“Down sampling”

Determines the sampling rate of the audio signal. Possible values:

- **48 kHz** – corresponds to CD quality
- **96 kHz** – corresponds to DVD quality
- **192 kHz** – no down-sampling (Blu-ray quality)



Menu “Audio mapping”

You can assign the audio inputs to the HDMI inputs here: Would you like to connect your PC or a source with DVI picture output via HDMI, but the sound card or the device only emit the sound via an optical output?

Your Impaq 8000 can do this: Select the desired HDMI input and configure the desired audio input on the far right of the menu, which is “Optical” in this case.

Menu “Language”

You can set the language for the system menus and for the playback of DVD/BD here.

- **OSD** – language of the system menus
- **Disc menu** – language of the DVD/BD menus*
- **Disc audio**– language of the DVD/BD audio tracks*
- **Disc subtitles** – language of the DVD/BD subtitles*. The setting “None” deactivates the subtitles.

*) if available in the desired language

Menu “Network”

Setting the network and Internet options.

“Information”

Provides an overview of current settings. All values can be configured manually under “IP setting” (see below).

“Connection test”

With this function, the Impaq 8000 checks whether there is a network connection and whether the Internet is available. “Successful” or “Connection error” will appear after completion, then push **OK (26)**.

“Internet connection”

Switches the network connection on and off.

- **Active** – The network is switched on.
- **Standby** – The network is switched off. No network settings are possible in this case as well.

“Connection type”

Determines the type of network connection:

- **Hard-wired** – the Impaq 8000’s jack LAN (11) is connected to a network/router via an Ethernet cable .

“IP setting”

Define the network settings.

- **Automatic** – automatically determines the required parameters. Prerequisite: An active DHCP server (e.g. a router).
- **Manual** – The IP address and all other values must be configured. Only a qualified expert should configure these settings. Use the number buttons **1...0 (22)** for input.
- **IP address:** The network address for the receiver consisting of four numbers each between 0 and 255, e.g. 192.168.001.100.
- **Subnet mask:** Based on the network mask, the receiver detects which addresses it reaches on its own network and which it only reaches via the gateway (router). Consists of four numbers, each between 0 and 255, e.g. 255.255.255.0.
- **Standard gateway:** Network address of the gateway (router), which establishes the connection to the Internet.



Settings

- **DNS1:** Network address of the primary domain name server (DNS), which locates the corresponding IP address for domain names (e.g. www.teufelaudio.com). Comparable with a phone book.
- **DNS2:** As before, is used when the primary DNS fails. This specification is optional.

“BD live connection”

With many Blu-ray discs, you can download and view additional content from the Internet such as trailers, documentation or director’s comments regarding the inserted movie via menu click. You can also participate in interactive online games or quizzes.

Notice: For this function, a USB stick with approx. 1 GB of free memory must be inserted in one of the USB ports **(6)** or **(14)**.

Here, you can specify whether BDs can use Internet access.

- **Allowed** – All BDs allowed.
- **Partially allowed** – Only BD Live content, which has been certified (approved) by the content owner.
- **Prohibited** – Prevent access for all BDs.

“DLNA”

The Impaq 8000 is a digital media player (DMP) that complies with the specifications of the Digital Living Network Alliance (DLNA). If you operate a digital media server (DMS, also referred to as a DLNA server) on your network, the Impaq 8000 can play movies, music and images from this server (see page 36).

This setting activates or deactivates the DMP.

“Proxy settings”

Configure settings for the Internet connection via a proxy server. You can obtain the required parameters (URL or IP address as well as the port) from the operator of your proxy server.

Menu “Wireless”

In this menu, you establish the radio link to your wireless subwoofer and/or Bluetooth® source device. This process is known as “pairing”.

“Wireless subwoofer”

The notice “Connecting” appears after this menu item is selected. If you push the **OK button (26)** now, the Impaq 8000 will search for a wireless subwoofer.

On the wireless subwoofer, start the process to establish a connection (see the corresponding user manual).

The connection will be established after a short time and the status “Connected” is shown; you can now use the wireless subwoofer with the Impaq 8000.

“Bluetooth”

1. After selecting this menu item, the notice that Bluetooth® will be activated appears on the screen. Push the **OK button (26)** to continue or the button **⏏ (51)** to abort.
The Impaq 8000 will now search for a Bluetooth® device.
2. You can also let your source device/smartphone search for Bluetooth® devices (see the user manual for the source device).
“Teufel Impaq 8000” should also appear in the list of detected devices following the scan.
3. Select “Teufel Impaq 8000” from the list of detected devices.
Pairing is now complete and your Impaq 8000 will now act as a Bluetooth® playback device. The Impaq 8000 will now play back all sounds that would otherwise be played by your source device/smartphone.

Bluetooth® operation is described from page 31.



Menu “System”

“System information”

With this menu item, you can access the version of the firmware of your Impaq 8000.

“Screensaver”

This darkens the screen after a configurable period of inactivity, e.g. to prevent burn-in on plasma screens. Possible values: 5, 10, 15, 20 minutes and Off.

“Auto Off”

After the screensaver activates (see above), the receiver waits for the configured period of time to elapse before automatically switching to standby. Possible values: 30 minutes, 60 minutes, never.

“Disk Auto Start”

With this setting, you determine whether playback will automatically start or not after you insert a CD/DVD/BD. Possible values:

- **On** – playback starts automatically (not possible with some Blu-ray discs)
- **Off** – playback does not start automatically.

“HDMI CEC”

If this function is activated, CEC-compatible devices are controlled by a control command via the HDMI connection. As a result, devices connected to the TV set are e.g. automatically activated and deactivated using the remote control for the television set. Possible values: On, Off.

“HDMI ARC”

The audio return channel (ARC) switches on to play back the television audio via the HDMI cable (see „TV set“ on page 14). The TV set must support this function.

“BD live storage”

The BD Live function creates a folder “BUDA” stick for saving data on the USB. You can delete data here if the memory on your stick runs full.

- **Information** – Displays the available memory on the inserted USB stick or displays “No USB”.
- **Clear BD live data** – clear the memory used by BD Live on the USB stick.

“DMR”

Switches the DLNA-DMR (Digital Media Renderer) on and off (see „DLNA mode“ on page 36).

“DivX® VOD DRM”

You can find the DivX® VOD registration code of your Impaq 8000 here. You can register your device with this code to permit you to play DivX® videos protected by copyright and copy protection. For more information, visit the website vod.divx.com.

“Firmware Update”

If the Impaq 8000 is constantly connected to the Internet, it will check every time it turns on whether an updated version of its operating software (“firmware”) is available and will initiate the update process after confirmation.

You can manually load the update for your Impaq 8000 via the Internet connection with this menu item. For this, follow the on-screen instructions.

Alternatively, you can download the new firmware from the Teufel website and save it on a USB stick. As soon as you insert the USB stick in the USB port (14), the new firmware will be detected. An info window on the screen indicates this. Follow the instructions to install the update.

The update will take several minutes, during which time you must not turn off the device and interrupt the Internet connection. After the update, you reset the Impaq 8000 to the default settings (see the following section).

“Default settings”

Here, you can reset all receiver settings to the default settings. After the reset, you will have to reconfigure your individual settings.



Settings

Menu “Security”

Setting for the child lock for BD/DVD playback.

Some BD/DVDs are labelled for certain age groups and cannot be played back if a corresponding setting has been configured. Unfortunately, many BD/DVDs are not properly protected and even personally burned copies and video movies are not provided with this protection.

You will need a four-digit password to change the setting. **The default is “0000”** (the number zero four times).

“Change the password”

1. First enter the current password with the number buttons **1...0 (22)**.
2. Then enter the new password twice with the number buttons **1...0 (22)**.

Be sure to memorise the new password! You can reset the receiver to the default settings in an emergency (see the “System” menu).

“Child lock”

Setting the protection level. Eight levels are available, which correspond to the recommendations of the MPAA (Motion Picture Association of America) for rating movies. This system only takes effect with American DVDs/BDs.

You will be asked for a password in order to open this menu.

- **Off** – This turns protection off. All movies can be played back without restrictions.
- **CHILDREN** – suitable for children.
- **G** – all children and general supervision.
- **PG** – parental supervision.
- **PG-13** – parental supervision for children under 13 years of age.
- **PGR** – parental supervision required.
- **R** – restricted viewing.
- **NC-17** – not permitted for persons 17 years of age and under.
- **ADULT** – only for adults.



Main menu “Sound”

You can set the sound system of the Impaq 8000 in this menu.

Menu “Dynamic range”

This function prevents high volume peaks; the 10 highest levels on CD, DVD and BD are limited. Please keep in mind that this only works with Dolby Digital audio tracks.

Menu “Sound”

Here you can configure the sound within two frequency ranges:

Bass low tones

Treble high tones

You can configure either tone range from “–10 dB” (lower) to “+10 dB” (increase).

(Also see „Adjusting the sound“ on page 17.)

Menu “Level”

You can increase or decrease the relative volume from “+10 dB” to “–10 dB” for each speaker here. Select the “dB” value and change it with the navigation buttons ▲ ▼ (25).

(Also see „Adjusting the channel level“ on page 18.)

Menu “Test tone”

Volume adjustment with a test tone. As previously described with “Level”, you can increase or decrease the relative volume for each speaker. In the process, audio playback will be replaced by a test tone (a noise) whose volume can be adjusted using the control (5) and the **Volume +/- buttons (28)**. The test tone mutes as soon as you leave the sub-menu.

Menu “Lipsync”

Digital image processing in the television set requires some time. In order to keep the image and sound synchronous, television sets delay the sound by a few milliseconds. To ensure that the sound of your Impaq 8000 is also synchronous, you can configure the audio delay for certain inputs from 0 to 200 ms here.

(Also see „Setting the audio delay“ on page 18.)

Menu “Input level”

Here you can set the relative volume from –10 dB to +10 dB for each source in order to adjust different levels of the internal and external sources.

Menu “Distance”

Speakers located at different distances to the listening position may disturb the surround sound effect. Set the distances from the listening position to each speaker from 0 to 1200 cm in order to compensate these run-time differences.



Source

Main menu “Source”

You can set the source here.

Notice: You can reach a DLNA server by selecting “Disc” or the main menu item “My media”.

Radio Mode

The radio is capable of receiving mono and stereo stations in the USW range from 87.5 to 108 MHz, RDS mode is also possible.

Push the RADIO button **(35)** to activate radio as source.

Setting the radio stations

Set the receiving frequency with the navigation buttons ◀▶ **(25)**:

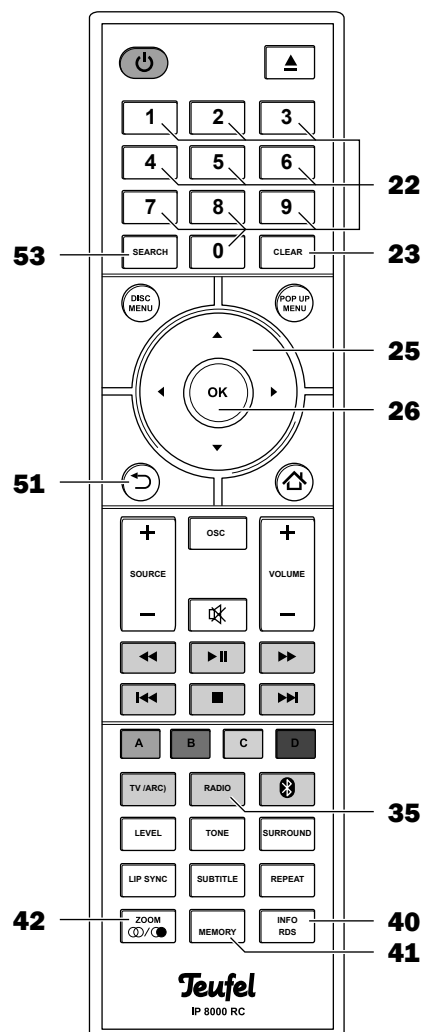
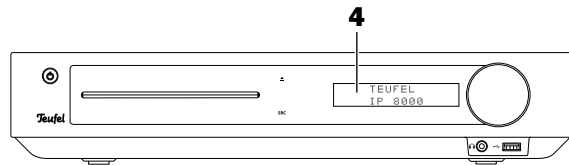
- Automatic: Pushing the button for approx. one second initiates station scanning in the desired direction (then release the button) until the radio turns to the next station with sufficient transmission power.
- Manual: Each time you tap the button, the frequency will be increased or decreased by 0.05 MHz.

The selected frequency will appear on the display **(4)** and on the screen.

If the station transmits an RDS signal, the name of the station and, if applicable, the radio text will appear on the display **(4)** and screen after a few seconds – you may first have to push the **INFO/RDS button (40)** for this. The program type will also be displayed on the connected screen.

With the **INFO/RDS button (40)**, you can switch the display with the RDS information on the bottom line of the display **(4)** between radio text and the programme type (PTY) or completely switch RDS off – the top line will then show the station memory number (if it has been selected) and the bottom line will show the station frequency.

In stereo mode, you may experience noticeable noise with weak stations. In this case, you switch to mono-mode by pushing the **ZOOM/Ⓞ/● button (42)**.



Station memory

Your Impaq 8000 can save up to 30 FM stations. You can conveniently select the saved stations.

Saving stations manually

1. Set the desired station as described above.
2. Push the **MEMORY button (41)**.
The number of the first available memory slot will blink on the display **(4)** and on the screen.
3. Enter the two digits of the desired memory slot with the number buttons **1...0 (22)** or select a memory slot with the navigation buttons **▲▼(25)**.
4. Push the **MEMORY button (41)** again.
The memory slot number will stop blinking.
The station has now been saved.

Saving stations automatically

Notice: All saved stations are deleted in the process.

1. Push the **SEARCH button (53)**.
The question "APS Start?" will appear on the display **(4)**.
2. Push the **OK button (26)** to continue or the button **↵ (51)** to abort.
3. Station scanning will start. The radio will now search for stations with adequate transmission power and automatically save them.
Once all 30 memory slots are occupied or the end of the frequency band has been reached, the station seek will stop and switch to the last station found.

Selecting stations from the memory

You can select the saved stations one after another with the navigation buttons **▲▼ (25)** or the skip buttons **◀◀ (47)** or **▶▶ (32)** or select them directly by entering the corresponding double digit combination with the number buttons **1...0 (22)**.

Deleting saved stations

Push the **CLEAR button (23)** to clear the currently selected station memory slot.

Bluetooth® mode

You can connect compatible Bluetooth® devices such as most smartphones with your Impaq 8000 via Bluetooth®. The audio output of your smartphone is then played back by the Impaq 8000.

The Bluetooth® wireless transmission system has a range of approximately 10 metres that is limited by walls and furnishings. If the connection is cut off, the Impaq 8000 will attempt to re-establish a connection until you select another source.

NOTICE

Only use the Bluetooth® function in locations where wireless radio transmission is allowed.

Please keep in mind that the Bluetooth® and NFC behaviour may differ depending on the operating system of the source device.

Bluetooth® options



Depending on the device type, your source device/smartphone may also have a number of Bluetooth® options such as media playback and call function. Here you can activate and deactivate the desired options.

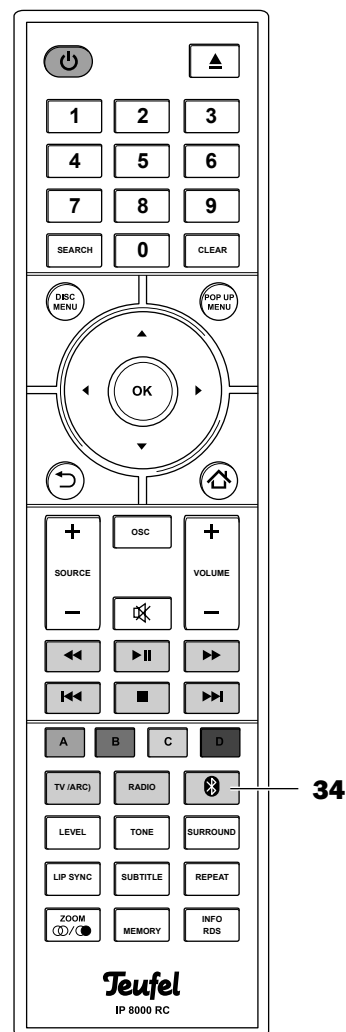
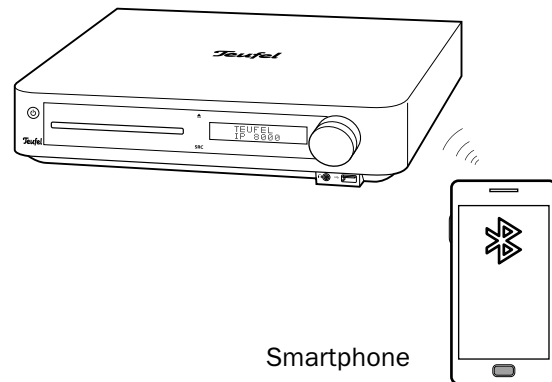
You can find more information about the Bluetooth® options in the user manual of your source device/smartphone.

Pairing

To play the audio of your source device on your Impaq 8000 via Bluetooth®, you must first connect the devices with each other. This is called “pairing”. The Impaq 8000 provides manual and automatic pairing via NFC.

Manual pairing

1. Turn on the Bluetooth® function on your source device (e.g. smartphone).
2. Use the  button (**34**) to select the “Bluetooth®” input on the Impaq 8000. “BT” will appear on the display and after a moment “Disconnected”.
3. Push the  button (**34**) and hold it for approx. 3 seconds. “Pairing” will appear on the display. The device is now in pairing mode.
4. Let your source device/smartphone search for Bluetooth® devices. You will find more information about this in the user manual of your source device.




After the search run, the “Impaq 8000” should also be present in the list of detected devices.

5. Select “Impaq 8000” from the list of detected devices.
Pairing is now complete and your Impaq 8000 will now act as a Bluetooth® playback device. The Impaq 8000 will now play back all sounds that would otherwise be played by your source device/ smartphone.

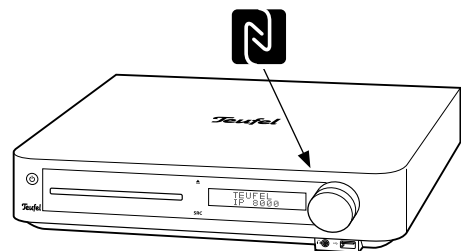
Pairing via NFC

NFC (Near Field Communication) is a transmission standard for the wireless exchange of data over short distances. Your Impaq 8000 can create a connection to a compatible source device via NFC.


1. Switch the NFC function on your source device on (Bluetooth® does not have to be turned on the source device).
2. Hold your source device close to the NFC contact zone  on the top side of the Impaq 8000 (see fig. right).
If FM or AUX is selected as the source, the Impaq 8000 will automatically switch to Bluetooth® mode. After a short time, you will be asked to allow the NFC connection.
3. Confirm the request on your source device.
Pairing is now complete and your Impaq 8000 will now act as a Bluetooth® playback device. The Impaq 8000 will now play back all sounds that would otherwise be played by your source device/ smartphone.


After finishing your phone call, the sounds will once again be diverted and played back by your Impaq 8000.

- If your Bluetooth® source device has a USB charging cable, you can connect it to the USB ports **(6)** or **(14)** for supplying power.
- To terminate the Bluetooth® connection, turn off the Bluetooth® function on your source device and select another source on the Impaq 8000.



Playback

 The volume setting of the source device also affects the volume of the Impaq 8000.

1. Use the  button **(34)** to select Bluetooth® as the source.
2. On your source device, switch the Bluetooth® function on.
3. Start playback on your source device.
 - Depending on the source device, you can use the playback functions of the Impaq 8000 completely or in part with your source device (see “Playback functions” on page 37). Otherwise, you can control playback on your source device.
 - If your source device is a smartphone, the Bluetooth® connection will be interrupted in the event of an incoming call and you can make phone calls as usual.

BD/DVD/CD mode

Suitable BDs/DVDs/CDs

- Only use commercially-available BDs/DVDs/CDs carrying one of the adjacent symbols.
- Normal BDs/DVDs/CDs with a diameter of 80 and 120 mm can be used.
- You can find the data formats that can be played in the adjacent table.
- The device plays DVDs with the country code "2".
- Discs burnt on a home system can normally be read but an excessively high burn speed or defective blank discs can cause problems.
- Discs produced for commercial purposes cannot always be read.



Handling CDs

Every disc is encased in a durable plastic layer to protect it against outside influences. However, you must always protect the discs against dirt and scratches.

Your Impaq 8000 can compensate smaller damages on the disc. Larger scratches or other damages can cause the disc to catch or lead to similar errors. Also observe the notes on proper handling of discs on the disc sleeve!

Disc playback

CAUTION



Operating the device when the housing is open will cause an invisible or visible laser beam to be emitted.

- Do not look into the beam, even if you are using optical instruments.


NOTICE

Risk of damage!

- Do not in any case insert multiple discs on top of each other.
- Do not insert any other objects than BDs/DVDs/CDs.

Supported data formats

Video	Audio	Images
BD	AAC	JPEG
DVD	MKA	HD JPEG
ASF	MP3	JPEG Progressive
DivX/Xvid	WMA	
DivX-HD	FLAC	BMP
Divx plus HD	WAV	PNG
MKV	LPCM	GIF
MP4	Ogg Vorbis	
MPEG-1/-2	Real Media Audio	
MPG		
WMV	WMV	
FLV	MLP	
VOB	HDCD	
AVCHD		
VCD		
SVCD		

1. Access the main menu by pushing the  button **(27)**.

2. Carefully insert the BD/DVD/CD with the labelled side up into the disc slot **(2)**.


The disc will be drawn in.


Depending on the setting and the disc, playback will automatically start after a few seconds or a menu will appear (see “File selection” on page 40).


– If you load a BD or DVD, which was already played and was ejected during play back or after pushing STOP once, a window will appear where you can select whether you want to continue from the last position viewed or from the beginning. If you do not select anything, the disc will continue from the last position viewed after a short time.

Notice: This function is not supported by all disc types.

– If you have inserted a Blu-ray, a notice will briefly appear on the display that the BD live memory is being checked, which can be occupied as a memory slot for other accessible disc information. However, a Blu-ray can also be played normally without the BD live memory.

– If the main menu of the Impaq 8000 appears, select the item “My media” with the navigation buttons  **(25)** and push the selector button **OK (26)**.


– Now select the item with the disc symbol “ **(25)** and push the selector button **OK (26)**.

You can navigate through the menus of the BD/DVD with the navigation buttons  **(25)** and the selector button **OK (26)**.

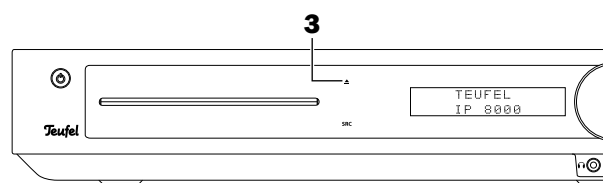
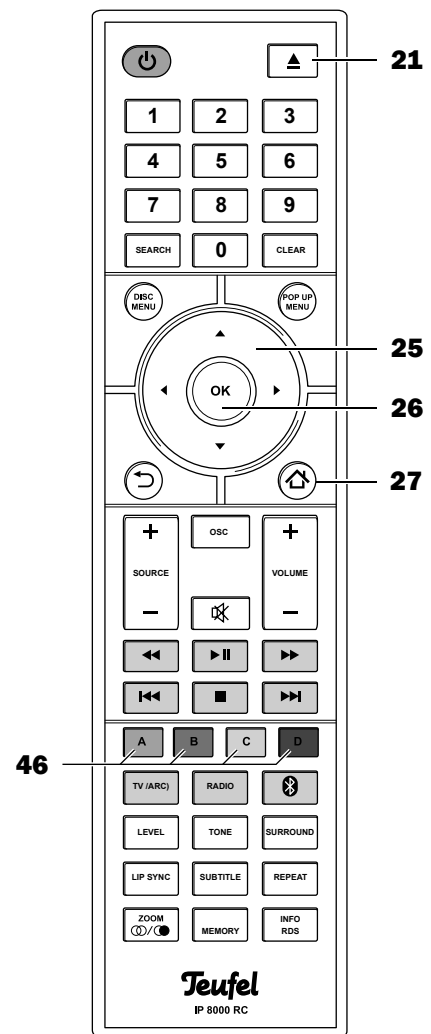
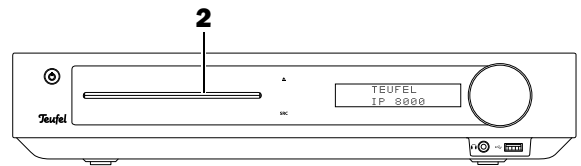
Many BD programmes also use the coloured control buttons **A B C D (46)**.

The playback functions for disc, USB and DLNA are identical and are described in the section “Playback functions” on page 37.

Ejecting the disc

1. Push the  button **(3)** or **(21)**. The disc is ejected to the front.

2. Carefully take the disc out of the slot.



Your Impaq 8000 can read USB memory sticks and USB hard-drives with the USB 1.0 to 3.0 specifications and play back the photos, music files and videos saved on them. It is also possible to directly connect various camcorders and play back AVCHD movies saved on them.

You can find the data formats that can be played back in the table on page 33.

Handling mobile storage devices

USB sticks are sensitive electronic devices and must be handled accordingly. When not using your storage device, you should be absolutely sure to close it with a protective case or cap.

NOTICE

Risk of damage!






- Do not use any storage devices with mechanical damage or which have fallen in liquid.
- Do not expose the storage devices to direct sunlight.

Improper handling may result in data loss!

- If possible, make backup copies of your data.

Connecting and playing back a USB device

Insert the USB stick or the plug of your USB device in one of the USB ports (6) or (14). The plug only fits the jack in one orientation.

1. Access the main menu by pushing the  button (27).
2. Select the item “My media” with the navigation buttons   (25) and push the selector button **OK** (26).
3. Now select the item “USB1” with the navigation buttons   (25) and push the selector button **OK** (26).

If multiple USB storage devices are connected or if there are multiple partitions on a USB storage device, they are numbered.

Shortly afterwards, the file selection (see page 40) with the items Image, Music, Video and AVCHD will appear.


The playback functions for disc, USB and DLNA are identical and are described in the section “Playback functions” on page 37.

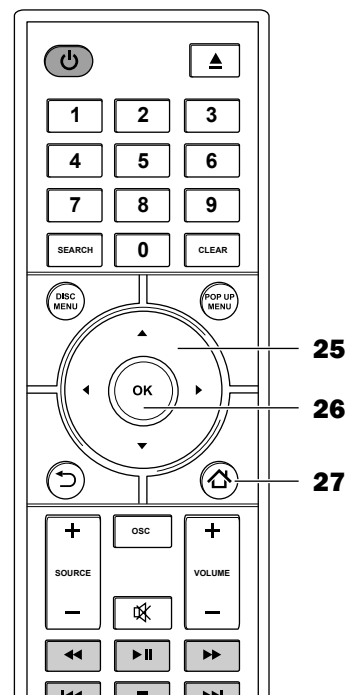
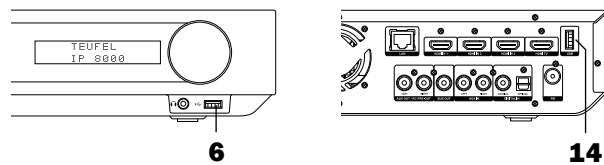
Removing the USB device

NOTICE

Risk of damage!

- Never remove the USB device while the Impaq 8000 is still accessing it!

1. Access the main menu by pushing the  button (27).
2. Wait until the playback has stopped.
3. Pull the USB plug out of the USB port (6) or (14).



DLNA mode




The Digital Living Network Alliance (DLNA) is a trade organisation formed by companies from the computer and entertainment industry, which develop common standards for connecting these devices. The Impaq 8000 is a digital media player (DMP) and digital media renderer (DMR) certified in accordance with the DLNA.


DMP





As a DMP, the Impaq 8000 is able to connect with any local DLNA digital media server (DMS) via the network where it can display and play the media provided there. DMS are available as programmes for all phone and PC operating systems. Some network drives (NAS) and video cameras have corresponding functions.

You require such a server on your network for DLNA operation and DLNA operation must be activated (see “DLNA” in the “Network” menu on page 24).

The Impaq 8000 automatically searches for DLNA servers on the network and displays them in the “My media” menu.

1. Access the main menu by pushing the  **button (27)**.
2. Select the item “My media” with the navigation buttons   **(25)** and push the selector button **OK (26)**.

 DLNA servers are listed with this symbol and their name.

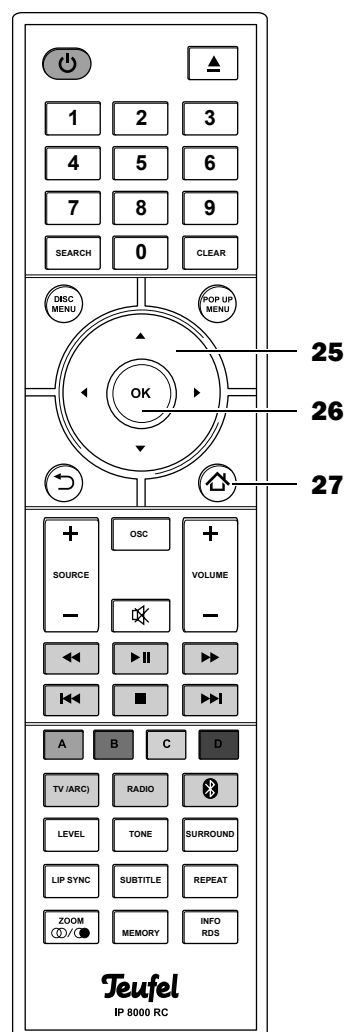
3. If your DLNA server is not shown, make sure that your server is online. Now select the item “DLNA search” with the navigation buttons   **(25)** and push the selector button **OK (26)**.
Your server should appear in the list after a short time.
4. Select the desired DLNA server with the navigation buttons   **(25)** and push the selector button **OK (26)**. Shortly afterwards, the file selection (see page 40) with the items Image, Music and Video will appear.

The playback functions for disc, USB and DLNA are identical and are described in the section “Playback functions” on page 37.

DMR

As DMR, the Impaq 8000 will provide its playback functions on the network and can be controlled by a digital media controller (DMC).

For this, DMR mode must be activated on the menu (see “DMR” in the “System” menu on page 25).



Playback functions

General playback information

- Pause playback: Push the button ►|| (31).
A freeze image will appear while paused.
- Continue playback: Push the ►|| button (31) again.
- Play the next track or next chapter: Tap the ►►| button (32).
- Play the track or chapter from the beginning: Tap the ◀◀| button (47).
- Play the previous track or previous chapter: Tap the ◀◀| button (47) twice.
- Fast track playback: Tap the ◀◀ button (48) or ►► (30). Each tap will increase the playback speed: 2x, 4x, 8x, 16x, 32x. Playback will occur without sound; the elapsed time for the track will appear on the display (4).
To resume normal playback push the ►|| button (31).
- Stop playback: Push the button ■ (33).
A red square will appear in the top left corner of the TV screen. Playback can be continued at any time by pushing the ►|| button (31).
Unlike the pause function, a freeze image will not be displayed.
- Stopping playback: Tap the ■ button (33) twice.
The previous menu will appear.

Only with video playback:

- Switch subtitles or switch them off (if available on the BD/DVD): Tap the **SUBTITLE** button (39).

Only with video or image playback:

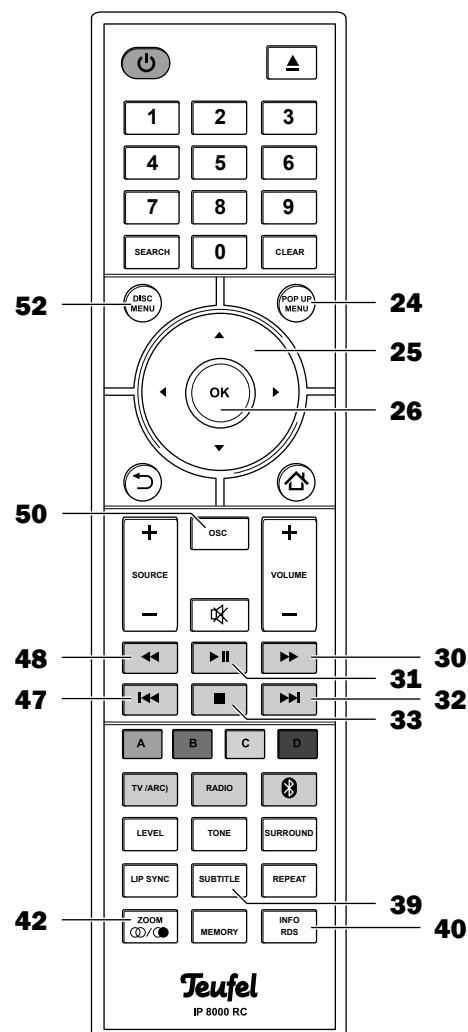
- With the **ZOOM**/⊙/● button (42), you can change the zoom factor of the picture in the following order during video or image playback: 2x, 3x, 4x, 1/2x, 1/3x, 1/4x, 1x

BD and DVD playback

Access the BD/DVD menu: Push the **DISC MENU** button (52).

Access the pop up menu (if present on the BD/DVD): Push the **POP UP MENU** button (24).

Continue playback: Push the **POP UP MENU** button (24) again.



Display information

You can display an info window at the top of the screen during playback by pushing and holding the **INFO/RDS button (40)**:




- a** Active function, pause in this case
- b** Media type (BD, DVD, VCD, data disc) and video file format
- c** Current track / number of tracks on the disc
- d** Current chapter / number of chapters in the track
- e** Elapsed time of the current track
Switch to track time (“TT”) and chapter time (“CH”) as well as between the elapsed time and remaining play time with the **INFO/RDS button (40)**. For the remaining play time, “–” is located in front of the symbol.
- f** Current audio track/number of audio tracks, language, signal type
- g** Subtitles, deactivated in this case


Push the **INFO/RDS button (40)** again for about 2 seconds to hide the info window.


Video playback menu


You can access a menu with the **OSC button (50)** during video playback. Depending on the type of video, not all menu items are available.


- Select the desired item with the navigation buttons **▲▼ (25)** and push the **OK button (26)** or the navigation button **▶ (25)**.
- With the navigation buttons **▲▼ (25)**, you can now select an option and trigger it with the **OK button (26)**.
- Push the **OSC button (50)** again to hide the menu.


 Number of the current file/number of files in this folder – you can select another file for playback.


 Current track/ number of tracks – you can select another track.


 Current chapter/total chapters – you can select another chapter.


 Elapsed time – you can switch between track time (“TT”) and chapter time (“CH”) as well as between elapsed time and remaining play time. For the remaining play time, “–” is located in front of the symbol.


 (Playback) mode – select between normal or random playback.


 Audio – here you can switch the audio track (if there are multiple tracks in the video).


 Angle of view – you can select another angle of view for the camera here (if available in the video).


 Subtitles – you can switch the subtitles here (if there are multiple subtitles available in the video) or completely deactivate them.


 Subtitle style – to the extent available on the BD, you can select how the subtitles will appear here.


 Second video – to the extent available on the BD, you can start a second instance of video playback (picture in picture).

 Second tone – to the extent available on the BD, you can activate a second audio track (e.g. comments).

 Immediate search – will fast forward 30 seconds without audio.





 Immediate repeat – the movie will be reset by 8 seconds.

 2D to 3D – You can add a 3D effect to any movie (3D-capable TV set required).

 2D to 3D Level – Intensity of the 3D effect, can be set from 1 (low) to 32 (intense).

Repeat function

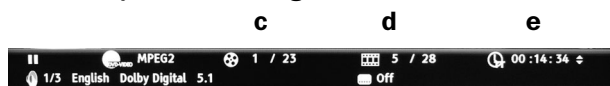
By tapping the **REPEAT** button (38), you can switch the repeat functions; you will see the selected function on the top left of the screen:





- Off (no symbol) – normal playback, no repeat
-  repeat current file
-  repeat current chapter (only BD/DVD)
-  repeat current track (only BD/DVD)
-  repeat everything

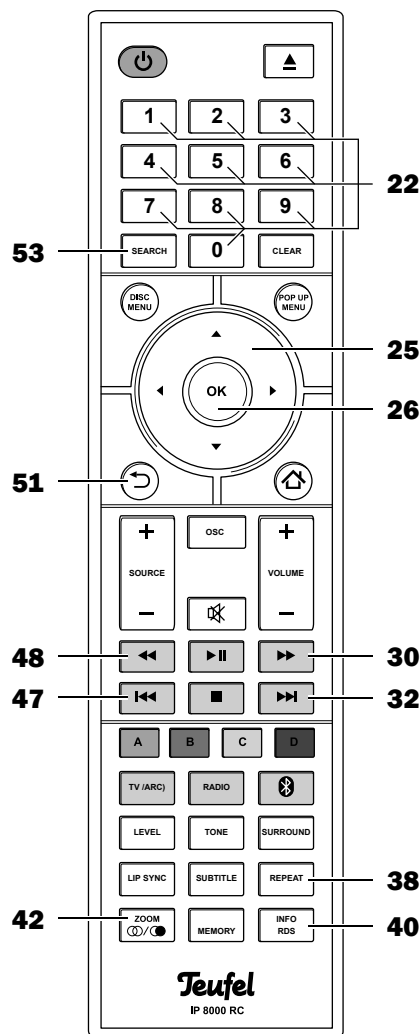
Search

With the search function, you can select a specific time, chapter and/or track (if available on the disc).

1. Push the **SEARCH** button (53). The info window will appear and the area e (elapsed time) is indicated by a blue rectangle:



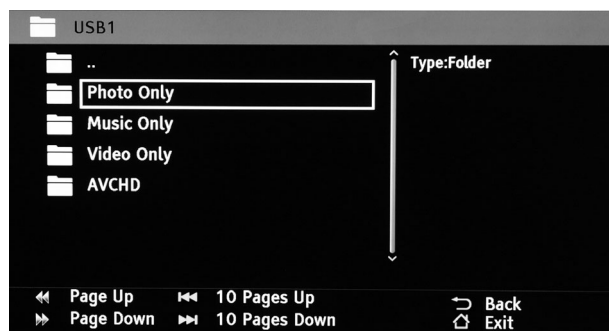
2. Select the desired area (c, d or e) with the navigation buttons  (25).
3. Push the **OK** button (26). Red arrows will appear in the selected area.
 - In the e area, switch between hours, minutes and seconds with the navigation buttons  (25).
4. With the navigation buttons   (25), change the value or enter the desired value with the number buttons **1...0** (22).
5. Finish by pushing the **OK** button (26). Playback will start from the selected position.
6. Push the **SEARCH** button (53) to cancel. The info window will disappear. It will automatically disappear after 10 seconds of inactivity.



File selection

The content of DLNA servers, discs and USB sticks, on which media files are saved, will appear in a browser on the screen.

- The left column will display the folders “Photo Only”, “Music Only” and “Video Only”, also “AVCHD” with USB storage devices.
- Details concerning the selected media file will appear in the right column.
- Navigate the folders with the ▲▼ buttons (25); with the buttons ◀◀ (47), ▶▶ (32), ◀ (48) and ▶▶ (30), you can also quickly browse through longer lists of folders.
- With the **OK** button (26) or the navigation button ▶ (25), you can open the selected folder or start playback of a media file.
- The top folder “..” will take you back one folder. You can also use the navigation button ◀ (25) or the ↶ button (51) for this.



Video playback

1. Open the “Video Only” folder and the desired sub-folder if necessary.
2. Open the desired video file.
Playback will start. The possible functions are described in the chapter “Playback functions” on page 37.

Music playback

1. Open the “Music Only” folder and the desired sub-folder if necessary.
2. Open the desired music file.
The track and all subsequent music tracks located in the folder will be played.
The following information will appear on the screen during playback:
Track number/number of tracks, file type, total time and, to the extent present, track name, artist, album, genre and picture of the album.
- Using the number buttons 1...0 (22) you can enter the number of a track, which will immediately begin to play then.

The other functions are described in the section „General playback information“ on page 37.

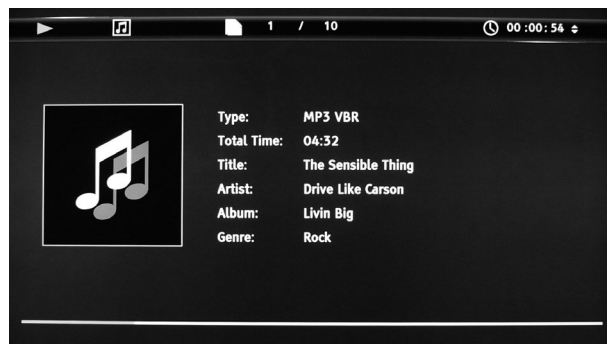



Photo playback


1. Open the "Photo Only" folder and the desired sub-folder if necessary.
 2. Open the desired image file.
The image and all following images from the folder will be shown in sequence as a slide show on the TV set.
- Start and stop the slide show with the ►|| button (31).
 - End the slide show with the ■ button (33) and go back to the file selection.
 - Change the speed of the slide show with the buttons ◀◀ (48) and ▶▶ (30): fast, medium, slow.
 - Rotate image: Push the navigation buttons ◀▶ (25).
 - Flip the image vertically or horizontally: Push the navigation buttons ◀▶ (25).
 - With the number buttons 1...0 (22), you can enter the number of an image, which is then immediately shown.
 - By pushing and holding the **INFO/RDS** button (40), you can display the info window:





With the **OSC** button (50), you can access the slide show menu:

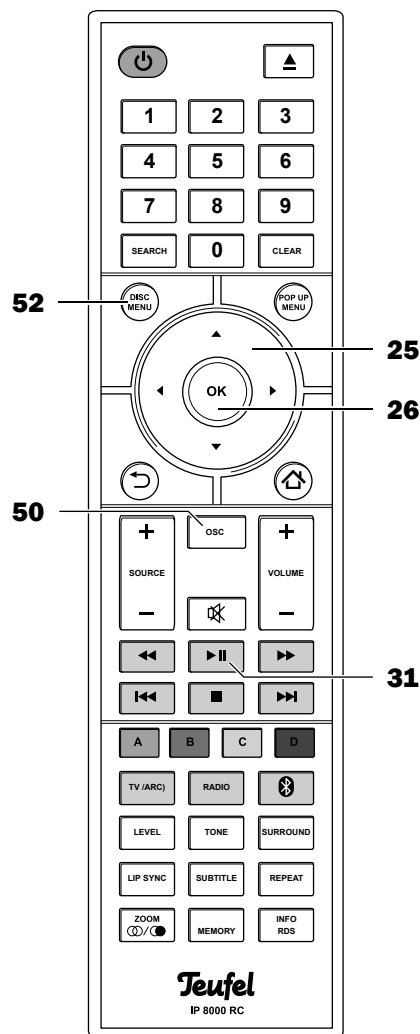
1. Select the desired item with the navigation buttons ▲▼ (25) and push the **OK** button (26).
2. With the navigation buttons ▲▼ (25), you can select an option and trigger it with the **OK** button (26).

 Number of the current file/number of files in this folder – you can select another file for playback.

 (Playback) mode – choose between normal or random playback.

 Slide show– image display duration: fast, medium, slow. Select with the **OK** button (26).

 Transition (only when the slide show is running): Select with the **OK** button (26).



AVCHD playback

The video format AVCHD (“Advanced Video Codec High Definition”) is a recording format for digital camcorders developed by Sony and Panasonic.

If your camcorder records videos in AVCHD format and has a USB port, you can connect the device directly to the Impaq 8000 (please consult the user manual of the device for this). You can also play AVCHD archives on the USB stick or USB hard-drives:

- Open the “AVCHD” folder.
Playback will start. If a menu movie exists, it will be the first to be played, then the saved recordings will play in order.
- You can access the menu movie with the DISC MENU button **(52)**.

The Impaq 8000 is also capable of playing AVCHD folders on discs (CD, DVD), so-called AVCHD discs or mini-BDs. The movie is automatically played after the disc has been inserted. After it stops, an “AVCHD” disc symbol will appear on the main menu under the “My media” item.

The other functions are described in the section “Playback functions” on page 37.

NOTICE

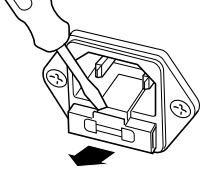
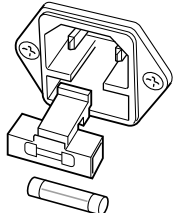

External influences may damage or destroy the device.

- *If the device is to be left unattended for a prolonged period of time (e.g. during a vacation) or if a thunderstorm is forecast, pull the mains plug out of the socket. Otherwise, sudden overvoltage could cause the device to become defective.*
- *In the event of prolonged absence, remove the batteries from the remote control. Leaked batteries may damage the remote control.*
- *If possible, only use plain water without any additives. In case of stubborn marks, a mild soap solution may be used.*
- *Do not use caustic cleaning products, white spirit, thinners, petrol or similar under any circumstances. Such cleaning agents may damage the delicate surface of the housing.*

- Ideally, you should remove dust or small amounts of dirt with a dry, smooth leather cloth.
- Use a damp cloth to rub off stubborn dirt. Make sure that no liquid penetrates the housing.
- Then immediately wipe the damp surfaces off with a soft cloth without applying pressure.

Troubleshooting

The following advice should help you to solve problems. If this does not help, you will find useful information in the detailed FAQs on our website. Otherwise, please contact our hotline (see page 3). Take note of the warranty instructions.

Problem	Possible cause	Solution
The Impaq 8000 doesn't work.	The receiver has no power.	Check the mains cord and socket.
	Fuse defective.	<p>1. </p> <p>Disconnect the mains cord. Carefully pull the fuse holder on the mains connection jack out.</p> <p>2. </p> <p>Push the old fuse down and out. Insert a new fuse (6.3 A delayed action) and push the holder back.</p>
The device doesn't emit any sound.	The wrong source has been selected.	Select the right source (page 16).
	The device is set to "mute".	Push the  button (29) or adjust the volume.
	The volume is set to "0".	Increase the volume (page 17).
	Speaker cable not stripped.	Properly connect the speakers (page 13).
The subwoofer hums.	The subwoofer is connected to a different power circuit from the rest of the system.	Connect the subwoofer and Impaq 8000 to the same power circuit.
	The hum is due to line disturbance.	Buy a mains filter and connect both devices to it.
	The humming is caused by a multiple socket strip.	Use a different multiple socket strip or connect the subwoofer directly to the wall socket. It may also help to insert the mains plug in the socket the other way around.
The sound is not ideal.	The settings are incorrect.	Set the bass tones, treble tones and sound effects (see page 27).
Playback is noisy.	Generally speaking, the Impaq 8000 is a very low-noise system. The speaker system with very high resolution in the high range area can expose the poor quality of a signal source (e.g. from MP3 files).	Ensure that the source is sending a clear signal to the Impaq 8000.

Problem	Possible cause	Solution
No playback of CD/DVD/BD.	No disc has been inserted.	Insert a CD/DVD/BD.
	Disc has been inserted upside down.	Insert the disc with the labelled side facing up.
	The region code of the DVD/BD does not correspond to that of the device.	Insert a DVD/BD with a corresponding region code (2).
	The CD/DVD/BD is damaged or dirty.	Clean or change the disc.
	Condensation in the device.	Take out the disc and do not use the device for one to two hours while activated.
No picture.	TV set not switched on.	Switch the TV set on.
	An incorrect AV input has been selected on the TV set.	Select a suitable AV input on the TV set (e.g. HDMI 1).
	Incorrect HDMI resolution has been configured on the Impaq 8000.	Check the settings and change them if necessary (see page 21 Menu "Video setup").
	The connector cable is incorrectly wired or loose.	Correct the cable connections.
	Connector cable is damaged.	Replace the connector cable.
Picture is fuzzy/distorted.	The CD/DVD/BD is damaged or dirty.	Clean or change the disc.
	The incorrect colour standard (PAL/NTSC) has been set on the television set or receiver.	Reset the colour standard (PAL/NTSC) (page 21). PAL is the correct standard in Germany and Western Europe (except from France).
	Disturbance caused by intermediary devices, e.g. video recorder.	Connect the devices directly.
	The image format of the receiver is incorrectly configured.	Correctly configure the TV aspect ratio (see page 21).
Skipping to the next track or chapter does not work.	Some BD/DVDs do not permit skipping, for example during the initial warning notice.	Continue playback.
	The BD/DVD only has one chapter.	Alternative: Fast playback.
No sound or not all audio channels are audible.	Speaker wired incorrectly.	Check the wiring and correct it.
	Audio settings are not correct.	Correctly configure the speaker settings and audio mapping (see page 22 and 23).
	Incorrect disc audio track selected.	Select another audio language (page 23 and 38).
	Playback speed has been accelerated or slowed down.	Switch to normal playback with the ► button (31) .
	Speaker cable not stripped.	Properly connect the speakers (page 13).

Problem	Possible cause	Solution
With stereo sources such as the playback of radio or an MP3 player, the rear satellites and/ or the center speaker do not emit sound.	MP3s, radio as well as many TV programmes only transmit stereo sound.	Switch the Impaq 8000 to a Pro-Logic mode or one of the DSP modes (5.1 Stereo). See „Surround mode selection“ on page 17.
No Dolby/DTS multi-channel sound is emitted via the connected digital source.	With the playback of digital sources, the Impaq 8000 automatically recognises the format of the signal source. If the Impaq 8000 fails to play multi-channel sound, there is presumably no multi-channel signal. Digital signal sources do not always transmit multi-channel sound, but may also emit regular stereo sound (2.0).	
“No disc” on the display.	CD/DVD/BD is damaged, dirty, incompatible or inserted upside down.	Clean or change the disc.
No or distorted music playback.	Incorrect file format. See table „Supported data formats“ on page 33.	Delete or skip the incorrect files.
	File damaged.	
BD Live function disrupted.	No Internet connection.	Test the network settings and correct them if necessary (page 23).
	No USB stick has been inserted.	BD Live requires a USB stick with 1 GB of capacity.
	BD Live storage full.	Check the memory and clear if necessary (page 25).
No sound in Bluetooth® mode.	No Bluetooth® connection.	Establish a connection (see page 31).
	Impaq 8000 has not been selected as the output device.	On your source device, select “Impaq 8000” as the Bluetooth® output device.
	Bluetooth® connection impaired by another radio system (e.g. cordless telephone or microphone, Wi-Fi).	Set up the Impaq 8000 and/or the source device in another location. Move to another room to test.
No sound via cable (AUX).	Volume of the playback program has been set to zero.	Carefully increase the volume on the source device.
You cannot toggle surround mode.	You are probably using a digital input. If a multi-channel Dolby or DTS signal is received on this input, the Impaq 8000 will automatically switch to the correct surround mode.	

Problem	Possible cause	Solution
The remote control is not working.	No clear line of sight between the remote control and the device.	Remove the obstacle.
	Remote control not properly aligned.	Point the remote control towards the device.
	Batteries have been inserted in the remote control with improper polarity.	Insert the batteries the right way around (see visual explanation in the battery compartment).
	Batteries in the remote control have been used up.	Insert new batteries.

Index

Symbole

7.1 22
16:9 21
1080p 24Hz 21

A

Antenna 15
ARC 25
Artist 40
Audio
 Delay 18, 27
Audio inputs 23
Audio track 38
Audio transmission 22
AVCHD 40, 42

B

Batteries 43
 dispose 7
 insert 11
BD 33
BD live 24
BD live memory 25
Bitstream 22
Bluetooth 24, 31
BUDA folder 25
Burns 25

C

Call 32
Camcorder 35, 42
CD 33
CEC 25
Channel level 18
Child lock 26
coaxial 14
Colour rendering 21
Colour spectrum 21
Control buttons 34
cordless 24
Country code 33
Crossover frequency 22

D

Data formats
 Supported 33
Deactivate 23
 network 23
Deep colour 21
Default settings 25
Digital Media Server 24
Disc subtitles 23
Disk Auto Start 25
Distances 27
DivX 25
DLNA 24, 36
DMR 25
DVD 33
 Country code 33
 eject 34
Dynamic range 27

E

Enlarge display 37

F

File selection 40
Firmware 25
Full RGB 21
Fuse 7, 44

G

Gateway 23

H

Hard-drives 35
HDMI 14, 22, 23
 ARC 25
 CEC 25
HD resolution 21
Headphones 14

I

Information 38
Internet 15, 23
IP address 23
IP setting 23

L

Level 27
Line filter 44
Lipsync 18, 27

M

Media files 40
Media server 24
Menu 19, 20
 BD/DVD 34, 37
 Pop up 37
 Video 38
Mono 29
Music 40
Mute 17

N

NFC 31

O

optical 14
Optical 14
OSC 38

P

Pack contents 8
Pairing 31
Password 26
PCM 22
Phase shift 22
Phone call 32
Pillar box 21
Playback 37
 random 38
Playback speed 37
Power supply
 USB 32
Pre Out 13
Projector 14

R

- Radio 29
 - Text 29
- Radio stations
 - save 29
 - Selecting stations from the memory 29
- RDS 29
- Rear center 12
- Receiving frequency 29
- Remaining play time 38
- Remote control 11, 43
- Repeat 38
- Repeat function 39
- Resolution 21

S

- Sampling rate 22
- Search 38
- Selecting stations from the memory 30
- Sensor buttons 16
- Settings 21
- Setting the radio stations
 - automatically 29
 - manually 29
- Slide show 39
- Sound 27
- Sound control 17, 27
- Sound system 27
- Source devices 14, 16, 27
- Speaker 12, 22
- Standby 16
- Standby mode 25
- Station 30
- Station memory 30
- Subnet mask 23
- Subtitles 23, 37, 38
- Subwoofer
 - wireless 24
- Surround 17
- synchronous 27

T

- Television 14
- Television audio 25
- Test tone 27
- Thunderstorm 43
- Track name 40
- TV aspect ratio 21

U

- Update 25
- USB 35
- USB stick 24
 - insert 35
 - play back 35
 - remove 35
- USW 15, 29

V

- Vacation 43
- Videos 40
- Volume 17
 - relative 18, 27

W

- Wide screen 21

Y

- YCbCr 21

Z


- Zoom factor 37

Technical data

Dimensions (WxHxD)	400 x 80 x 360 mm
Weight	4.8 kg
Operating voltage	230 V~/50 Hz
Max. power consumption	700 watts

You can find further technical data on our website.
Technical changes reserved.

Declaration of Conformity

 Lautsprecher Teufel GmbH hereby declares that this product is in accordance with the requirements of directives 2014/30/EU, 2014/35/EU and 2014/53/EU as long as it is installed and used according to the manufacturer's instructions. The full text of the EU Declaration of Conformity is available at the following Internet address:
www.teufelaudio.com/declaration-of-conformity.html

The following radio frequency bands and radio transmitters are used in this product:

Radio network	Frequency bands in Mhz	Transmitter power m W/dBm
Bluetooth	2400–2483.5	2.5/4
Averna	2405.35–2477.35	1/0
FM-Tuner	87.5–108	–
NFC	13.56	–

Teufel

For questions, suggestions or other issues please contact our customer service department:

Lautsprecher Teufel GmbH
BIKINI Berlin
Budapester Str. 44
10787 Berlin (Germany)

Phone.: 00800 200 300 40 (toll-free)
Fax: +49 (0)30-300930930
Service: www.teufelaudio.com/service
Contact: www.teufelaudio.com/contact

No liability is accepted for the accuracy of this information. Technical changes, typographical errors and other errors reserved.