

# Sound System



We hope you have lots of fun with your new Teufel sound unit!

Now all you have to do is connect your TV and peripheral units and off you go!

Further information – for example how to upgrade to 5.1 surround sound –

can be found at www.Teufel.de/huelsta



1568309

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# **General notes and information**

#### **Trademarks**

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Manufactured under licence of Dolby Laboratories. Dolby and the Double-D symbol are trademarks of

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protection in several countries.

The HDMI and High Definition Multimedia Interface sign. and the HDMI logo are trademarks or registered trademarks of HDMI Licensing LLC in the USA and other countries.

#### **Proper use**

The units are only to be used as an audio system. Only use the components as described in these Operating Instructions. Any other use is deemed to be improper and can cause damage to property or even harm persons.

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

The units are meant for use in private homes.

Before using the subwoofer, please first read the safety notes and the operating instructions carefully. This is the only way to ensure safe and reliable use of all functions. Please keep the Operating Instructions in a safe place and forward them to any later owner.

# For your safety

### Sign symbols

The following sign symbols are to be found in these instructions:

# / WARNING

This sign symbol denotes danger of a medium risk, which, if not avoided, can lead to death or severe injury.

# / CAUTION

This sign symbol denotes danger of a low risk, which, if not avoided, can lead to slight injury.

#### NOTE

This sign symbol warns about possible damage.

### Safety notes

# **⚠ WARNING**

# Incorrect electrical installation or excessive voltage can cause an electrical shock.

- The units are suitable for mains voltage of 230 V ~
   / 50 Hz. When connecting, please ensure that the voltage is correct. You will find more information on this subject on the identification plate.
- If damage has been caused to the housing or the mains lead, disconnect the mains plug immediately and do not continue using the unit. Check all components regularly for damage.
- Disconnecting from the mains is done by disconnecting the mains plug of the units.
   Therefore please ensure that the mains plug is easily accessible at all times.
- If the unit emits smoke, smells of burning or makes unusual noises, immediately disconnect the mains plug and do not continue using the unit.
- Never open the housing of the units. Repairs may only be done by an authorised dealer. Only components may be used which meet the original unit data requirements.
- Only use accessories specifically recommended by the manufacturer.

- · Only use the unit indoors.
- Do not use the unit in moist rooms, and protect it against drops of water or spraying. Ensure that no vases or other containers with liquid stand on the unit or in its vicinity so that no liquids can penetrate the housing. If water or any other foreign body should penetrate the housing, immediately disconnect the mains plug and remove any existing batteries if need be. Then send the unit to our service address.
- Never touch the mains plug with moist hands.

# Children can get caught up in the packaging and suffocate during play.

- Do not allow children to play with the unit or the packaging. There is a danger of suffocation.
- Ensure that children do not remove any small components from the unit (e.g. operating or plug adapters). They could swallow these components and suffocate.
- Never allow children to use electrical units unsupervised.

# If any components belonging to the remote control are swallowed, this can cause serious internal injury and even death.

- Store any new or used batteries in place inaccessible for children.
- If the battery compartment can no longer be closed securely, do not use the article any longer and store it in a place inaccessible for children.
- If you suspect that a battery has been swallowed or entered a person's body in any other way contact a doctor immediately.

#### Battery acids which have leaked can cause burns.

 Avoid contact of battery acid with the skin, eyes or mucous membranes. If there is contact with acid, rinse the affected parts immediately with sufficient clear water and, if necessary, contact a doctor.

# Batteries (particularly lithium batteries) can explode due to improper use.

- Never try to charge standard batteries.
- Only insert batteries of the same or similar type.
- Batteries and rechargeable batteries must not be heated up, short-circuited or disposed of by burning.
- Do not subject batteries or rechargeable batteries to direct sunlight.



# Listening to high volumes for long periods can cause damage to the hearing.

- Prevent injury by avoiding listening to high volume levels for long periods.
- Always keep a suitable distance away from the unit when it is used at high volume levels and never place your ears in the direct vicinity of the loudspeakers.
- If the loudspeaker is set to full volume, strong sound waves can occur. Apart from organic injury, psychological injury can also result. Children and domestic animals are particularly at risk. Set the volume level of your source device to a low setting before switching it on.



#### An incorrect location can cause damage.

- Do not use the unit in extreme temperatures or in environments involving a risk of fire or explosion.
- Do not use the units or the loudspeakers in vehicles where they are not firmly fixed in position, on unlevel surfaces, on instable substructures or on furniture, or on holding apparatus that is too small. The units or the loudspeakers could fall over and cause injury to persons or be damaged themselves.

#### PLEASE NOTE

# Other factors could damage the unit or even destroy it.

- If the unit is left unsupervised for a longer period (e.g. during a holiday), or if a thunderstorm is threatening, disconnect the mains plug. Any unexpected excessive voltage could otherwise cause a defect.
- If you are absent for a longer period, remove the batteries from the remote control. Leaky batteries could damage the remote control.
- If the unit comes out of a cold into a warm environment – e.g. after transport – condensation can build up inside the unit. In such a case leave the unit alone for at least 2 hours before connecting and using it.

#### Improper use of the unit can cause damage or fire.

- Do not place any open sources of fire such as burning candles or similar articles on top of the unit.
- Ensure there is sufficient ventilation.
- Do not subject the unit to direct sunlight.

### **Explanation of symbols**



Protection class II

Double insulation



Danger of electric shock – do not open housing.

Disconnect from mains before exchanging fuses.



Safety fuse T2 / 250 V



# Old units must not be disposed of with household waste!

If the unit is no longer suitable for use, every consumer is legally obliged to dispose of it separately from household waste, e.g. at a specified local collection point. This guarantees that all units are recycled properly and any negative effects on the environment are avoided.

That is why electrical apparatus is marked with the symbol shown here.



Batteries and rechargeable batteries must not be disposed of with household waste!

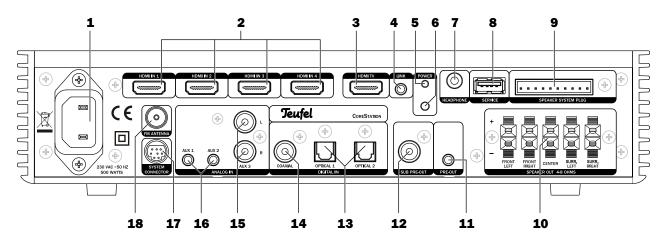
Every consumer is legally obliged to dispose of all batteries and rechargeable batteries, whether they contain damaging substances\*) or not, at a local collection point or at a local dealer, so that environmentally friendly disposal is ensured.

Batteries and rechargeable batteries should only be disposed of when they are not charged!

\*) marked with: Cd = Cadmium, Hg = Mercury, Pb = Lead

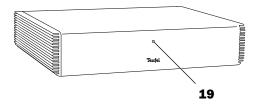
# **Control unit – Operating elements and connections**

# **Control unit rear view**



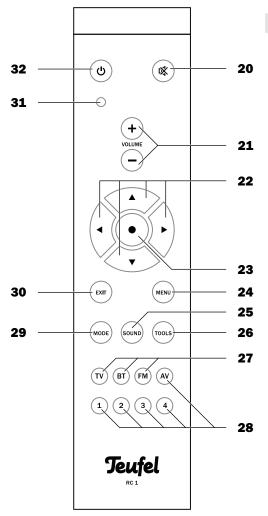
Pos.	Name	Description
1	_	Connection jack for mains cable
2	HDMI IN 1-4	Input jacks for external HDMI source devices
3	HDMI TV	HDMI output jack to TV set
4	LINK	Connection jack for future extensions
5	POWER	Operation mode LED display
6	_	Key to switch unit on / to standby
7	HEADPHONE	Connection jack for headphones
8	SERVICE	USB connection (only for service)
9	SPEAKER SYSTEM PLUG	Connection for loudspeaker system plug (5)
10	SPEAKER OUT 4-8 OHM	Connection clips for loudspeakers
11	PRE OUT	Analogue audio output jack
		3.1 mode: stereo downmix
		5.1 mode: surround channels
12	SUB PRE OUT	Line output jack for subwoofer
13	OPTICAL 1-2	Digital audio input jacks for optical cables
14	COAXIAL	Digital audio input jacks for coaxial cables
15	AUX 3	Analogue audio input jacks (cinch)
16	AUX 1-2	Analogue audio input jacks (3.5 mm jack plug)
17	SYSTEM CONNECTOR	Connection jack for future extensions
18	FM ANTENNA	Connection for FM (VHF) antenna

# **Control unit front view**



Pos.	Name	Description
19	_	Function LED

# Remote control RC 1



Pos.	Name	Description
20	ℴ	Mute (switch sound on and off)
21	VOLUME +/-	Lower (-) / increase (+) volume
22	⋖▶▲▼	Setting buttons
23	•	Enter button
24	MENU	Access main menu
25	SOUND	Access tone setting
26	TOOLS	Access "System Setup" menu
27	TV, BT, FM	Select source device TV, Bluetooth or radio directly
28	AV, 1, 2, 3, 4	Programmable source device buttons
29	MODE	Switching over surround mode
30	EXIT	Leave menu
31	_	LED signal (blinks every time a command is successfully transmitted by the remote control)
32	Ch	Switch unit on / to Standby

# **Connecting control unit**

### **⚠** WARNING

#### Danger of injury / damage!!

Lay out cables so that they cannot be tripped over.

#### FM (VHF) antenna

# **WARNING**

#### **Danger of electrical shock!**

If you use an outside or roof antenna, be sure that the antenna is correctly protected against lightning.

Connect the antenna for receiving FM/VHF stations to the FM ANTENNA jack (18).

This can be a roof/outside antenna or a cable TV connection. To do so you require a coax connection cable.

If no antenna connection is available at the site, you can use the loose antenna supplied ④. Push the plug of the antenna into the FM ANTENNA jack (18) and alter the position of the loose antenna until you get the best reception. Then fix the antenna in position.

#### Input jacks for source devices

The control unit provides you with 4 HDMI input jacks for digital audio/video signals (HDMI 1, 2, 3 and 4), three analogue sound input jacks (AUX 1, 2 and 3) as well as one coaxial and two optical digital sound input jacks.

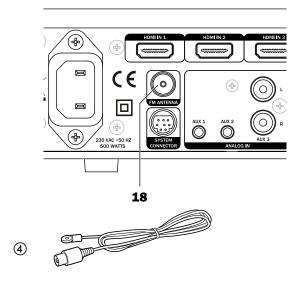
#### **HDMI 1, 2, 3 and 4**

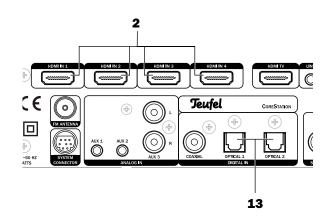
You can connect one HDMI source device with digital picture and sound signals (e.g. PC, Blu-ray player or games console) to each of the jacks (2). To do so you require an HDMI cable for each device.

If the device does not transmit sound via HDMI, you can allocate this device to one of the sound input jacks of the control unit in the "Audio mapping" menu (see page 18).

#### **OPTICAL 1 AND 2**

You can connect the optical digital sound output jacks of two source devices to the OPTICAL jacks (13). To do so you require an optical cable with a TOSLINK plug for each device.





#### COAXIAL

You can connect the coaxial digital sound output jack of a source device to the COAXIAL jack **(14)**. To do so you require a coaxial cable with cinch plugs.

#### **AUX 1, 2 and 3**

You can connect source devices with analogue sound to the jacks **(15)** and **(16)**. The AUX 3 jacks **(15)** are cinch jacks for connecting e.g. a cassette or tape recorder. The AUX 1 and AUX 2 jacks are both 3.5 mm jack plugs for connecting e.g. an MP3 player.

### **Output jacks**

#### Loudspeaker output jacks

The control unit has output stages for 5 loudspeakers – only the active subwoofer is connected by a cinch cable or remote control.

To connect loudspeakers, use high-quality twin-lead loudspeaker wires with at least 1 mm² diameter if possible. Corresponding cables can be ordered from our webshop (www.teufelaudio.com) in the "Accessories" section.

To connect the loudspeakers you can use the connection terminal SPEAKER OUT **(10)** or the SPEAKER SYSTEM PLUG **(9)** connection and the system plug supplied **(5)**.

#### NOTE

Use either the connection terminal **or** the system plug – never use both at the same time.

Connect the loudspeakers to the connection terminal SPEAKER OUT (10) as follows:

FRONT LEFT/RIGHT	front channels left/right	
CENTER	centre channel	
SURR. LEFT/RIGHT	rear channels left/right	

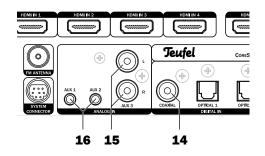
The clips are each marked red (+) and black (-).

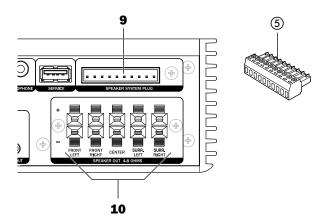
#### NOTE

#### **Ensure the polarity is correct!**

Connect the clips to the same colours. Otherwise the sound quality will suffer. The leads of the loudspeaker cables are marked by different colours or shapes.

 Connect the clips to the same colours. Otherwise the sound quality will suffer. The leads of the loudspeaker cables are marked by different colours or shapes.





- Separate the wires to about 30 mm and remove about 10 mm of the insulation in each case. Twist the wire so that no threads are protruding. Soldering is not necessary.
- Press the levers of the connection clip and feed the cable end into the corresponding aperture.
   When the levers are released, the cable is fixed in position.

Connect the loudspeakers with a system plug (5) in accordance with the adjacent table:

- Separate the wires to about 20 mm and remove about 6-7 mm of the insulation in each case. Twist the wire so that no threads are protruding. Soldering is not necessary.
- Feed the cable end into the corresponding aperture and screw it tight.
- After connecting all the cables, push the system plug (5) into the SPEAKER SYSTEM PLUG (9) jack as far as it goes.

#### Subwoofer

You can connect an active subwoofer to the SUB PRE OUT jack **(12)** with a cinch cable.

If you are using an active subwoofer with a remote control, activate the connection in the "System Setup" menu (see "Wireless" on page 21).

#### **Pre Out**

The functions of the PRE OUT analogue output jack **(11)** can be determined in the "System configuration" menu (see "3.1/5.1" on page 21):

3.1-mode Convert the 5.1 sound signal to the 2

stereo channels (2.0) (downmix), for example to transmit sound to a second

room.

5.1-mode Output from the rear channels

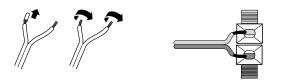
(surround).

You can connect your end amplifiers or active loudspeakers or even a remote control transmission system (for example the Teufel RearStation 4) to these jacks. To do so you require a stereo cable with 3.5 mm stereo jacks.

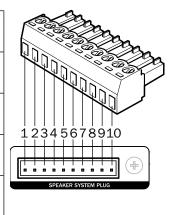
#### TV set

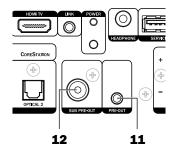
Connect your TV set or your projector to the HDMI TV jack (3). To do so you require an HDMI cable.

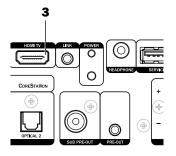
If your TV set does not transmit sound via HDMI ARC, you can allocate your TV set to one of the sound input jacks of the control unit in the "Audio mapping" menu (see page 18).



1	+	Front channel
2	-	left
3	+	Front channel
4	-	right
5	+	Centre channel
6	-	Centre channel
7	+	Rear channel
8	-	left
9	+	Rear channel
10	_	right







#### **Headphones**

You can connect stereo headphones with a 3.5 mm stereo jack to the HEADPHONES jack (7).

When connecting the headphones, the loudspeakers and the output jacks to the end stages **(11)** and **(12)** are automatically switched off.

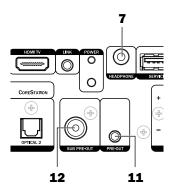
**∕ WARNING** 

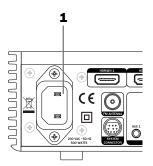
#### Danger of injury / damage!

Lower the volume before you remove the headphones plug, otherwise the loudspeakers might emit an unexpected loud noise. This could cause injury to your ears and to the unit.

#### **Mains connections**

- 1. Ensure that your active subwoofer and/or the active loudspeakers are switched off.
- 2. Insert the plug of the mains cable into the jack (1).
- 3. Insert the mains plug into a mains socket (230  $V\sim/50$  Hz).





### Remote control

#### Insert/change battery

If the remote control no longer functions correctly, or after 2 years at the latest, the battery should be replaced. Battery type: button cell CR2025H.

### **WARNING**

If the battery supplied with the article is swallowed, this can cause serious internal injury and even death.

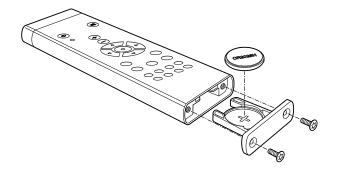
- Store any new or used batteries in place inaccessible for children.
- If the battery compartment can no longer be closed securely, do not use the article any longer and store it in a place inaccessible for children.
- If you suspect that a battery has been swallowed or entered a person's body in any other way contact a doctor immediately.

# Battery acids which have leaked can cause burns.

 Avoid contact of battery acid with the skin, eyes or mucous membranes. If there is contact with acid, rinse the affected parts immediately with sufficient clear water and, if necessary, contact a doctor.

# Batteries (particularly lithium batteries) can explode due to improper use.

- · Never try to charge standard batteries.
- Only insert batteries of the same or similar type (button cell CR2025H).
- Batteries and rechargeable batteries must not be heated up, short-circuited or disposed of by burning.
- Do not subject batteries or rechargeable batteries to direct sunlight.
- 1. Remove both screws on the battery compartment.
- 2. Pull the battery compartment out of the remote control.
- 3. Remove the old battery, and insert the new battery with the plus sign downwards in the battery compartment. Observe the notes on disposal of old batteries on page 5.
- 4. Push the battery compartment back into the remote control and insert both screws tightly.



### **Functioning**

The remote control transmits the control signals and has a range of about 6 metres.

Objects, walls and other sources of wireless transmission (e.g. telephones, Wi-Fi) can limit the range.

You do **not** need to hold a remote control in the direction of the control unit to transmit signals and the control unit can even be hidden behind the TV set or be placed in a cupboard.

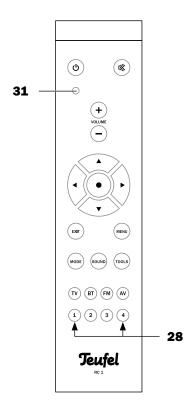
When the control unit receives commands from the remote control, the function LED **(19)** on the unit blinks quickly in white.

### Pairing the remote control

To use the remote control, it must be registered in the control unit.

To do so, hold the remote control in the vicinity of the control unit and press the special keys "1" and "4" (28) at the same time until the LED (31) blinks three times.

If the LED **(31)** blinks 10 times, there has been an error. Repeat the process.



# **Control unit - Basic functions**

#### Switch on and off

- Switch the control unit on by briefly pressing the button (6) on the rear side of the unit or  $\circlearrowleft$  (32). When the unit is switched on, the function LED (19) lights up briefly in white. The mode LED POWER (5) lights up permanently in red during operation.
- Switch the control unit into standby by pressing the button **(6)** or **(32)** longer (ca. one second).
- If the TV set connected via HDMI is CEC-capable, the control unit is switched on and placed in standby together with the TV set (see "CEC" on page 20).
- If a CEC-capable HDMI unit is connected to one of the HDMI IN connections (2), the control unit and the TV set are also switched on when the HDMI unit is switched on.
- If the control unit does not receive any signal for longer than 30 or 60 minutes, it switches automatically into standby (see "Auto off" on page 20).

In standby the function LED **(19)** lights up briefly in red and then goes off.

Standby mode does not separate the control unit from the mains. In order to switch it off completely, disconnect the mains plug from the main socket.

#### Select source

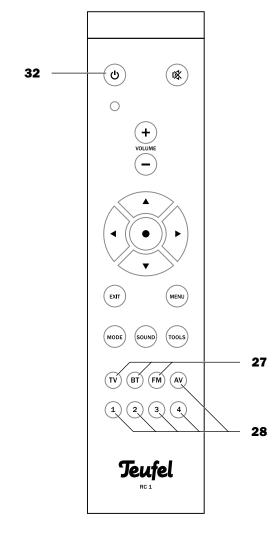
Select the most important source devices with the buttons (27) on the remote control.

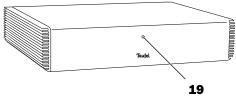
- TV TV set
- BT Bluetooth device (see page 22)
- FM radio mode

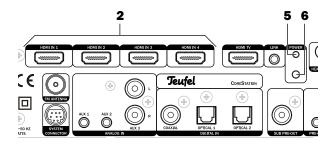
The other sources are selected with the special buttons **(28)**, which are allocated as follows in the standard settings:

Button	Press 1x	Press 2x	
AV	HDMI 1	HDMI 2	
1	AUX 1	AUX 2	
2	OPTICAL 1	OPTICAL 2	
3	COAX	AUX 3	
4	HDMI 3	HDMI 4	

The allocation of the buttons **(28)** can be changed to meet your requirements in the "Special buttons" menu (see page 20).







### **Adjust volume**

Adjust the required level with the VOLUME +/- buttons **(21)**.

#### Mute

You can switch the sound off and on again by pressing the  $\mathbf{A}$  button (20).

When muting, the mode LED **(19)** blinks slowly in white and "Mute: On" appears on the TV set connected.

#### **Adjust tone**

Adjust the tone with the SOUND (25) button.

- 1. Select the required tones by pressing the SOUND **(25)** button several times:
  - Base deep tones (bases)
  - Treble high tones
- 2. Adjust the selected tone from "-10" (lower) to "+10" (increase) with the **△**/**▼** buttons **(22)**.
- 3. End the setting procedure with the EXIT button (30).

#### Select surround mode

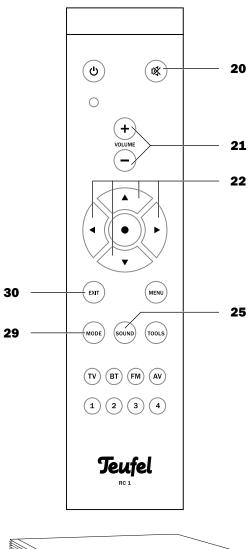
Change the surround mode for stereo sources in this order with the MODE **(29)** button.

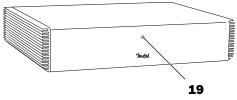
2.1 stereo	Stereo only via front left/right and subwoofer
3.1 stereo *)	Stereo via all channels (Upmix)
Dolby PLII movie	Dolby Pro Logic II for film
Dolby PLII music	Dolby Pro Logic II for music

#### **Dolby Digital and DTS**

When playing back Dolby Digital or DTS coded multichannel tracks, the surround mode is preset and the MODE button (29) is therefore inoperable.

\*) 5.1, when the surround channels are activated (5.1 mode).





# **Control unit - Menu functions**

Set the functions for the control unit via the menu. This is how to operate the menu:

- 1. Switch on the control unit and your TV set.
- 2. Select the control unit as the source on your TV set.
- 3. Press the MENU button **(24)**.

  The main menu appears on the TV set connected.
- 4. Select the required submenu with the **▲**/▼ buttons **(22)**.
- Press the button (23).
   The submenu opens and you can select the next submenu with the ▲/▼ buttons (22) or alter the values.
- 6. Accept the settings by briefly pressing the button **(23)**.
- End each function or cancel it with the EXIT button (30) and return to the previous menu.
- Press the MENU button (24) to leave the menu at any time.
- Access the System Setup menu directly with the TOOLS button (26).

If the menu appears in German, change the language for the screen menu to English:

- 1. Press the TOOLS button (26).
- 2. Select "D/E".
- 3. Select "English".

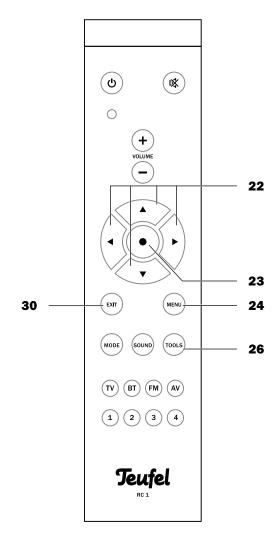
  The menu on the screen switches over to English.
- 4. Press the MENU button **(24)**. The menu disappears.

#### "Tuner" menu

This menu is only available in radio mode (FM).

#### **Station memory (presets)**

Here you can change the station memory with the  $\blacktriangle/\blacktriangledown$  buttons (22).



#### **Frequency**

To set the reception frequency, begin the station search by pressing the  $\triangle/\nabla$  buttons (22) in the required direction and it automatically stops as soon as a station is found with a sufficiently strong signal.

#### Mode

If the stereo signals are weak there can be interference, which you can prevent by switching over to mono reception.

	Reception automatically switches to stereo if reception is strong enough.
Mono	Reception permanently set to Mono.

#### **Station memory**

#### **Current frequency**

Here you can save the station currently being received on the next free memory slot.

#### Station search (APS)

Here you can automatically set up station memory. When "OK?" appears, press the • button (23) briefly.

#### **Erase memory**

- Select "Current slot?" to delete only the current station memory slot.
- Select "All slots?" to delete all station memory slots

Press the • button (23) to delete or the EXIT button (30) to cancel.

#### "Surround" menu

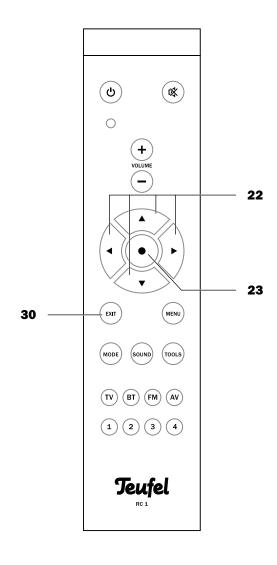
Change the surround mode for stereo sources in this order with the  $\blacktriangle/\blacktriangledown$  buttons (22).

2.1 stereo	Stereo only via front left/right and subwoofer
3.1 stereo *)	Stereo via all channels (Upmix)
Dolby PLII movie	Dolby Pro Logic II for film
Dolby PLII music	Dolby Pro Logic II for music

<sup>\*) 5.1,</sup> when the surround channels are activated (5.1 mode).

#### **Dolby Digital and DTS**

When playing back Dolby Digital or DTS coded multichannel tracks, the surround mode is preset and the MODE button (29) is therefore inoperable.



#### **Tone Control menu**

#### Tone

Here you can set the tone (trebles and bases). Possible values: from -10 dB (lower) to +10 dB (raise).

#### Mode

#### **Dynamic Compr.**

Dynamic compensation controls volume deviations between individual tracks on the CD or other digital sound sources so that playback is neither too loud nor too low. Possible settings: on, off, auto.

#### Cinema EQ

This function reduces the treble share of originally mixed film sound to an optimal adaptation of the sound for the typical acoustics of a living room. Possible settings: on or off.

#### **Equalizer**

Here you have very fine tone adjustments in nine frequency ranges at your disposal. Possible values: from -20 dB (lower) to + 6 dB (raise).

The "Reset" menu item sets all frequency ranges for the selected channel to zero (neutral).

Note: the equaliser is inactive for some High Definition formats.

#### Speaker Levels menu

Here you can set the relative volume for each loudspeaker within a range from "-10" (lower) to "+10" (raise).

In 3.1 mode the rear loudspeakers are not available.

With "test tone" you can activate or deactivate pink noise as a neutral test sound.

We recommend using a sound level measuring device for optimal sound level adjustment.

#### Source Levels menu

Here you can set the relative volume for every sound source within a range from "-10" (lower) to "+10" (raise).

#### **Audio Mapping Menu**

Here you can select an audio input jack for each of the 4 HDMI inputs and the TV set.

Example: you would like to connect a PC without HDMI output. You can transmit the picture signal with a DVI-to-HDMI adapter, whilst the sound is transmitted via cinch cable to one of the analogue input jacks (AUX).

If the HDMI-ARC function was activated for the TV set ("TV"), the "TV" menu item is not available.

#### Speaker Setup menu

#### Speaker size

Here you can set the size of the loudspeakers being used so that these can be operated optimally. There are five configurations to choose from.

The letters represent the loudspeakers:

Front left/right, Center, Surround left/right.

S (small) stands for small and capital L (large) stands for large loudspeakers. The last digit stands for the subwoofer (1 = present, 0 = not present)

#### Crossover

With Crossover you can determine up to which frequency the subwoofer is to work. Possible values: 80 to 250 Hz in 8 steps.

Details of recommended crossover frequencies can be found in the technical data for the relevant satellite loudspeakers in our webshop.

#### **Phase Sub**

Here you can switch the phase shift (180°) for the subwoofer on and off. Select the setting at which the subwoofer sounds loudest and most exact.

#### **Lip Sync**

Digital picture processing in the TV set requires some time. TV sets delay the sound for a few milliseconds so that the picture and the sound remain synchronised. Here you can set audio delay within a range of 0 to 200 ms for each of the HDMI and the other input jacks, in order to keep the sound synchronised.

#### Distance

The sound impression in the room can be affected by different distances from the listener to the loudspeakers. To balance out these differences, you can set a slight delay of the signal for all the channels. Measure the distance from the listener to the loudspeakers and enter the values in this menu. The system then calculates the necessary delay.

#### System Setup menu

#### **Special Keys**

The AV, 1, 2, 3, 4 buttons **(28)** are for selecting the source devices, and you can allocate the buttons to meet your own requirements. Each button can activate two source devices:

- "Primary" press button once.
- "Secondary" press button twice quickly ("double-click").

#### **HDMI**

#### **CEC (Consumer Electronics Control)**

This function enables operation of devices via the HDMI connection. The control unit is switched on and placed in standby together with the TV set. With many TV sets you can also set the volume of the control unit with the remote control of the TV set.

Possible settings: on or off.

#### ARC (Audio Return Channel)

With an HDMI connection, this channel provides a rear channel for audio data from TV sets which support this function. The sound can flow from the TV to the control unit during television reception without another cable having to be connected. When the ARC function is activated, the connection 9 "COAXIAL 1" is no longer available.

Possible settings: on or off.

- With some TV sets these functions have to be activated in the menu – please look at the operating instructions for your TV set.
- The ARC function is only supported by many TV sets from an HDMI input jack. This is usually marked "ARC".
- The CEC function must be activated for the ARC function to be available.
- When the CEC function is activated, the standby current consumption is increased.

#### **Passthrough**

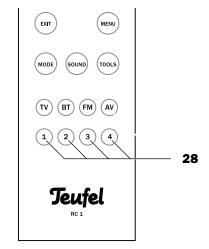
Here you can determine if the sound from the HDMI 1 to 4 connections is also passed through to the TV set. Possible settings: on or off.

#### Auto-off

The unit switches into standby after the predetermined period if it is inactive. Possible values: 60 min., 30 min. (default setting), never.

#### Power On level

Here you can determine the volume when the unit is switched on.



- Last: the volume level last set when the unit was switched off.
- Fixed: you set the volume within a frequency from -50 dB (quiet) to 0 dB (loud).

#### **Wireless**

In this menu you set up the wireless connection to your Bluetooth source device and/or your remote-controlled subwoofer. This process is called "pairing".

When selecting the device ("Bluetooth" or "Wireless Sub") you see the current status: "Disconnected" or "Connected".

Pairing Bluetooth devices is described in the following chapter "Bluetooth playback".

#### **Wireless Sub**

This menu item is for connecting a remote-controlled subwoofer to the system. It is not required when the unit is fitted in a cupboard because the subwoofer is connected by cable.

#### 3.1/5.1

Here you can switch between 3.1 and 5.1 mode and determine the function of the analogue output jack PRE-OUT **(11)** (see page 10), to which you can connect a stereo amplifier, an active loudspeaker or a radio-controlled transmission system.

In this way sound can be transmitted to another room or the surround loudspeakers in 5.1 mode can be connected by means of a radio-controlled transmission system (such as the Teufel RearStation 4).

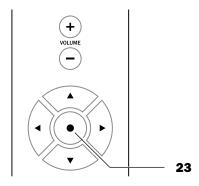
3.1	This is the normal configuration for your furniture because 3 front loudspeakers are available here.
5.1	Output for surround channels. You must enhance the system by fitting 2 rear surround loudspeakers

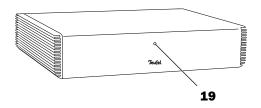
#### D/E

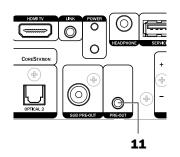
Here you can determine the language of the monitor menu. Possible settings: German, English.

#### **System Reset**

Here the unit is reset to the initial works settings.







# Control unit - Bluetooth playback

Compatible Bluetooth devices such as most smart phones can be connected via Bluetooth to your control unit. The sound output of the smart phone is then operated by the control unit.

The Bluetooth transmission system has a range of about 10 metres which can be affected by walls and furniture. If the connection is broken, the control unit tries to create a new connection until you select a different source.

#### **Pairing**

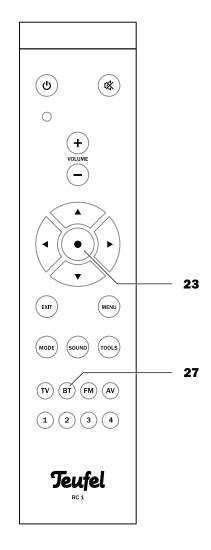
- 1. Select the "Wireless" submenu in the "System Setup" menu and then the "Bluetooth" item.
- 2. Press the button **(23)** twice to begin pairing. The function LED **(19)** now blinks quickly in a blue colour.
- 3. Switch on the Bluetooth function on your source device (e.g. smart phone).
- 4. Let your source device search for Bluetooth devices. More information on this can be found in the operating instructions of your source device.
- 5. "Control unit" should also appear in the list of devices found after searching.
- Select "Control unit" from the list of the devices found.
- The function LED (19) now lights up permanently in blue. The control unit plays all sounds which would otherwise be played by your source device.

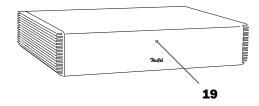
#### **Playback**

- 1. Select Bluetooth as the source with the BT button (27).
- 2. Switch on the Bluetooth function on your source device.
- 3. Begin playback on your Bluetooth device.
  The function LED (19) lights up in blue.

If your source device is a smart phone, the Bluetooth connection is interrupted in the case of an incoming call and you can telephone as usual.

- After you have ended your call, the sounds are diverted as before and played by your control unit.
- 4. To end the Bluetooth connection, switch off the Bluetooth function on your source device and select another source on the control unit.





# Control unit - radio playback

Your control unit has a radio receiver for receiving mono and stereo stations in FM/VHF frequencies from 87.5 to 108 MHz.

#### Select radio stations

Select the radio as the source with the FM button (27). The frequency set is displayed on the TV set connected.

Set the reception frequency with the  $\triangleleft$ / $\triangleright$ buttons (22):

- Automatic: after the button has been pressed for a long time (ca. 2 seconds), station search begins in the required direction until a station with a sufficiently strong signal is found.
- Manually: every time the button is tapped, the frequency is increased or decreased by one step (0.05 MHz).

If the station transmits an RDS signal, the frequency and the name of the station are displayed after a short time.

#### Stereo/Mono

If the stereo signals are weak there can be interference. In this case you can switch from mono to stereo reception in the "Tuner" menu, "Mode" item (see page 17).

#### Station memory

The control unit can save up to 30 stations. The stations saved can be selected easily by pressing a button.

#### **Save station**

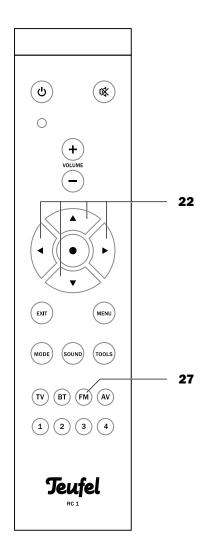
You can save individual stations in the "Tuner" menu, "Presets" item or you can allocate station memory automatically (see page 17).

#### Select saved station

Select the saved stations one after another with the  $\triangle/\nabla$  buttons (22).

#### **Delete station memory**

You can delete individual or all saved stations in the "Tuner" menu, "Erase memory" item (see page 17).



# **Control unit – Software update**

The software for the control unit is being further developed. Future versions can be downloaded from our website www.teufel.de/support.

#### Install new software

To do so you require an empty USB flash drive formatted in FAT-32.

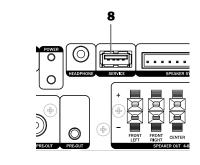
- 1. Download the new software from our website.
- 2. Unzip the downloaded file and save all the files included on the USB flash drive.
- 3. Disconnect the mains plug of the control unit from the mains socket and wait for about 5 minutes.
- 4. Insert the USB flash drive in the SERVICE jack (8).

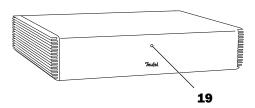
#### Note

#### Risk of damage!

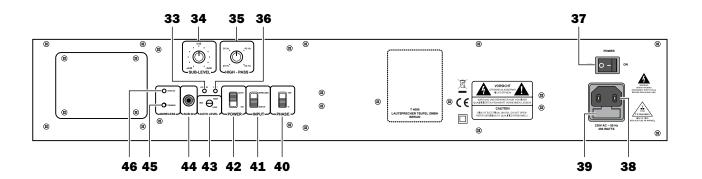
The control unit must not be switched off during the following steps!

- 5. Reconnect the mains plug of the control unit to the mains.
  - The update begins automatically. The function LED **(19)** blinks during installation in different colours.
- 6. After installation the control unit restarts.
- 7. Remove the USB flash drive from the SERVICE jack **(8)**. The new software has now been installed.





# **Subwoofer – Operating elements and connections**

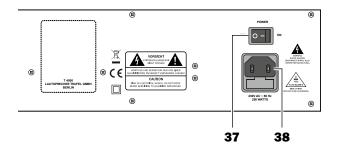


Pos.	Label	Description	Pos.	Label	Description
33	POWER	Status display (green = on, red = standby)	41	INPUT	Switch for input of subwoofer (Wireless/Sub In)
34	SUB LEVEL	Volume control for the subwoofer	42	POWER	Automatic on/off switch or permanent switch-on
35	HIGH-PASS	Control of frequency from which the subwoofer works	43	AUTO LEVEL	Controller for switch-on sensitivity of automatic switch
36	CLIP	Overload display (red)			on/off
37	POWER	Mains switch	44	SUB IN	Cinch input jacks
38	-	Mains connection jack	45	PAIRING	Button for creating wireless
39	_	Mains fuse			connection
40	PHASE	Switch for transforming the phase (alters the phasing of the subwoofer by 180°)	46	STATUS	Control LED for wireless connection

# **Connect subwoofer**

#### **Mains connection**

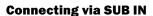
- Ensure that the mains switch (37) is switched off ("OFF" setting).
- Connect the mains connection jack **(38)** with the mains socket using the mains cable (3).



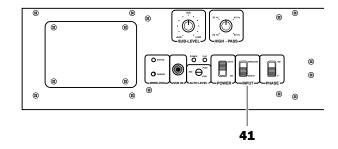
#### **Audio connections**

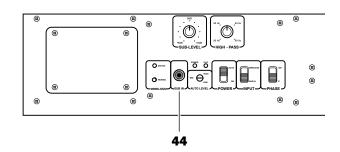
You can determine the audio input jack for the subwoofer with the INPUT **(41)** switch:

- "WIRELESS" If you have connected a wireless plug-in module ⑤ and your amplifier supports wireless connection with the subwoofer (a list of compatible devices can be found at www.teufelaudio.com).
- "SUB IN" If you have connected the subwoofer to the subwoofer output jack of your amplifier.



 Connect the SUB IN jack (44) to the subwoofer output jack of your amplifier using a mono cinch cable (not included).





# **Subwoofer - Operation and settings**

#### Switch on and off

 You can switch the mains supply on or off with the mains switch (37). If the subwoofer is switched on, the power LED (33) lights up green, if the subwoofer is in standby, it lights up red.

#### Automatic switch on/off

- You can change the status with the POWER switch (42):
  - **ON** The subwoofer is always switched on.
  - **AUTO** The subwoofer switches itself on as soon as an audio signal is detected. If there is no audio signal for ca. 20 minutes, the subwoofer switches into standby.
- If the automatic system doesn't work correctly, you can increase its sensitivity (turn to the right) or decrease it (turn to the left) with the AUTO LEVEL (43) controller. You need a small screwdriver for this.

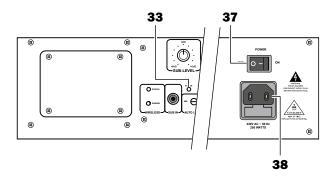
# Adjust amplifier and subwoofer

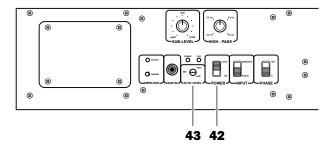
Most amplifiers provide a menu with settings for the loudspeakers (called "Speaker Setup" or similar).

#### **Amplifier settings**

If possible use the measuring function of the amplifier to adapt the sound level, phasing and running times to the room. If your receiver does not have an automatic measuring function, we recommend the following levels:

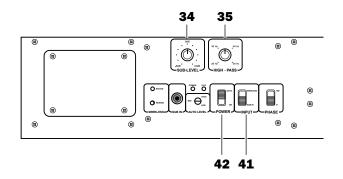
- subwoofer to "ON".
- crossover frequency for subwoofer (separation frequency) to 80 – 150 Hz, depending on the loudspeaker system connected.





#### **Subwoofer settings**

- POWER switch (42) to "AUTO"
- INPUT switch (41) to "SUB IN"
- SUB LEVEL loudspeaker controller (34) to Centre ("0 dB")
- HIGH PASS controller (35) to "20 Hz". Then you can determine from which frequency the subwoofer plays back deep sounds.
- 1. Now carry out a sound test and adjust the SUB LEVEL loudspeaker controller (34) until the subwoofer is "well audible" but does not rumble.
- 2. If some of the deep "tones" are too hard, increase the setting of the HIGH PASS controller (35).
- 3. Repeat these steps with various CDs and DVDs.



# **Care and maintenance**

- Remove any dust or slight dirt best of all with a dry soft leather cloth.
- Before you wipe off any heavier dirt with a slightly moist cloth, disconnect the mains plug. Ensure that no fluids penetrate the housing.
- Then wipe down the moist surfaces immediately with a soft cloth without applying any pressure.

#### Note

#### Risk of damage!

The wrong cleaning agents can damage the sensitive surface of the housing.

- If possible, only use clear water without any cleaning additives. In the case of stubborn stains, you can use a mild soapy water solution.
- Do not under any circumstances use aggressive cleaning agents, spirits, thinning agents, petrol or similar for cleaning purposes.

# **Troubleshooting**

The following notes are meant to help you to rectify errors. If you do not succeed, our comprehensive FAQs on our website are sure to provide further assistance. Otherwise, please get in touch with our hotline. Please also note the guarantee conditions.

### **Control unit**

Error	Possible cause	Remedy
Function LED <b>(19)</b> blinks in red.	Software error	Restart control unit: disconnect the mains plug, wait until the function LED <b>(19)</b> goes off, reconnect mains plug.
Control unit remains muted.	The false source has been selected.	Select the correct source (14).
	The unit is switched to "mute".	Press the 🗖 button or change the volume.
	The volume is set to "0".	Increase the volume.
The control unit rumbles.	The control unit is connected to a different circuit than the rest of the equipment.	Connect the control unit to the same circuit.
	The rumbling is caused by mains interference.	Buy a mains filter and connect all devices to it.
	The rumbling is caused by a multiple socket.	Use a different multiple socket or connect the control unit directly to the mains supply. It might also help to insert the mains plug into the mains socket the other way round.
Hissing noises occur during playback.	The control unit is basically a very low noise system. Usually the system, which provides very good resolution in high frequency ranges, shows up the inferior quality of a signal source (e.g. from MP3 files).	Ensure that a high-quality signal is being transmitted from the source to the control unit.
In the case of stereo sources like playing back radio or an MP3 player, the rear satellite and/or the centre loudspeakers do not function.	MP3s, radio and also many TV stations only consist of one stereo sound.	Switch the control unit into a ProLogic mode or into one of the DSP modes (5.1 stereo).
No Dolby/DTS multichannel sound is transmitted via the digital source connected.	When playing back digital sources, the control unit automatically recognises the format of the signal source. If the decoder doesn't play multichannel sound, then probably no multichannel signal is being received. Digital signal sources don't always have to transmit multichannel sound, but can also broadcast normal stereo sound (2.0).	
You cannot switch the surround configuration over.	You are probably using a digital input jack. If a Dolby or DTS signal is being received at this input jack, the control unit automatically switches over to the relevant correct surround configuration.	

# Subwoofer

Storing	Possible cause	Remedy	
The subwoofer doesn't work.	The subwoofer is switched off or has no mains supply.	Switch on the subwoofer with the mains switch (37). Check the mains cable and the socket.	
	The input signal is too weak.	The following solutions are possible:	
		Increase the volume on the amplifier.	
		Set the AUTO LEVEL controller (43) higher.	
		Switch the POWER (42) to "on".	
	The circuit breaker has been set off and the CLIP <b>(36)</b> display lights up in red.	Allow the unit to cool down and reduce the volume level slightly with the SUB LEVEL controller (34).	
	Fuse is defective.	1.	
		Disconnect the mains cable. Carefully remove the fuse holder on the mains connection jack.  Press the old fuse downwards to remove it. Insert a new delay-action fuse (2A) and push back the holder.	
The subwoofer rumbles.	The subwoofer is connected to a different circuit than the amplifier.	Connect the amplifier and subwoofer to the same circuit.	
	The rumbling is caused by mains interference.	Buy a mains filter and connect the amplifier and subwoofer to it.	
	The rumbling is caused by a multiple socket.	Use a different multiple socket or connect the control unit directly to the mains supply. It might also help to insert the mains plug into the mains socket the other way round.	
The subwoofer doesn't switch itself on automatically.	The POWER switch <b>(42)</b> is set to "ON".	Set the POWER switch (42) to "AUTO".	

#### **Control unit**

Dimensions (WxHxD)	319 x 68 x 240 mm
Weight	3 kg
Operating voltage	230 V~/50 Hz
Maximum power input	500 watts

#### Subwoofer

Dimensions (WxHxD)	955 x 125 x 300 mm
Weight	13 kg
Operating voltage	230 V~/50 Hz
Maximum power input	250 watts
Maximum load capacity	50 kg

# **Satellite loudspeakers**

Dimensions (WxHxD)	225 x 100 x 95 mm
Weight	1.25 kg
Impedance	4-8 ohms

More technical details can be found on the website www.teufel.de. Subject to technical alterations!



This product complies with the Guidelines of the Council of the European Community 2004/108/EC, 2006/95/EC and 1999/5/EG