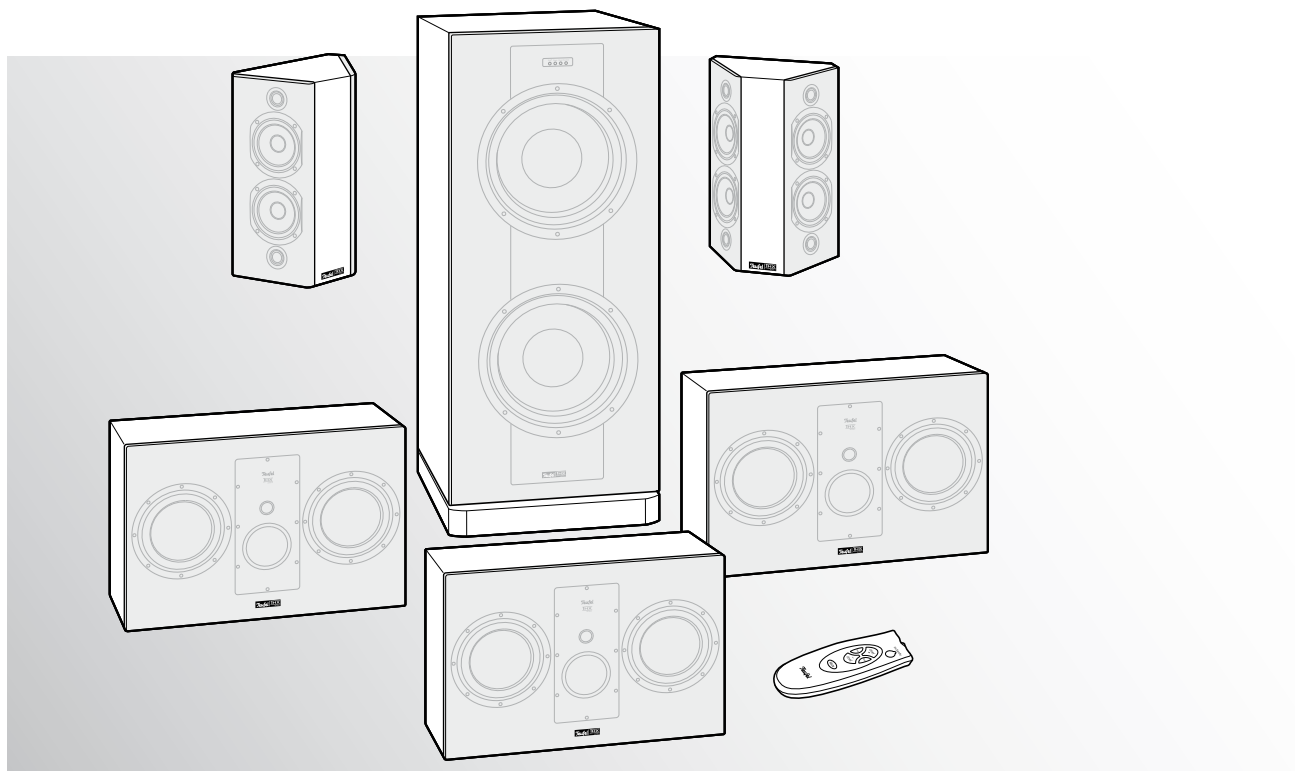


Technical Description and Operating Instructions



System 10 THX Ultra 2

5.1 Home Theater Speaker Set with THX Ultra 2 Certificate

Teufel

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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.

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Version 2.0
January 2013



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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 speakers WITH THE ORIGINAL PACKAGING. Empty boxes are not available!

Complaints

In case of 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. Series number and batch number respectively

Located on the back side of the unit,
e.g. serial number: S10....

Many thanks for your support!

Contact

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

Lautsprecher Teufel GmbH
Gewerbehof Buelowbogen
Buelowstrasse 66
10783 Berlin (Germany)

Phone 00800 - 200 300 40 (free of charge)

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

E-mail: service@teufelaudio.com

www.teufelaudio.com

Proper use

Use the unit only as described in these operating instructions. Any other use is considered improper and may result in damage to property or even injury to persons. The manufacturer assumes no liability for damages caused by improper use.

The unit is intended for private use.



Before operating the unit for the first time please read the safety notes and operating instructions carefully. Only in this way, will you be able to use all functions in a safe and reliable manner.

Keep the operating instructions safe and pass them on to anyone who may own the unit after you.

Safety notes

Caution icons

The following caution symbols are used in these instructions:

Danger High risk!

Failure to observe the warning may result in severe personal injury or death.

Attention Moderate risk!

Failure to observe the warning may result in property damage.

**Minor risk!**

Points which should be observed when handling the unit.

Safety notes

Danger Risk of electric shock!

Faulty installation of electrical equipment or mains voltage which is too high can cause

electric shocks.

- The unit is only suitable for use with a power supply voltage of 230 V~/50 Hz. Make sure that the mains voltage is correct. For more information, refer to the nameplate.
 - Check the unit regularly for damage. If the unit's case or mains cable is defective or shows other signs of visible damage, disconnect the mains adapter immediately from the socket and do not operate the unit.
 - The standby button does not disconnect the unit from the power supply. For this reason, connect it to an easily accessible socket so that you can quickly disconnect it from the power supply in the event of faults.
 - If the unit emits smoke or smells of burning or other unusual odours, disconnect it immediately from the power supply and do not operate it.
 - Never open the unit housing. Repairs may only be carried out by an authorised specialist workshop. In the process, only parts may be used, which correspond to the original unit data. There are electrical and mechanical parts in this unit which are essential in order to avoid exposure to sources of danger.
 - Do not insert any object through the vent slots in the housing.
 - Only use the unit in indoor areas.
 - Do not operate the unit in moist areas and protect it from drops of water or splash water. Ensure that no vases or other vessels containing liquids are on the unit or in its vicinity so that no liquid penetrates the housing. Should water or any other foreign object penetrate the unit, immediately disconnect the mains plug and, if applicable, remove any batteries present. Then send the unit to our service address.
 - Never touch the mains plug with wet hands.
-

Danger Danger to children!

Children can become trapped in the packing film when playing and suffocate.

- Do not allow children to play with the unit or the packaging film. Danger of suffocation exists.
 - Ensure that children do not remove small parts from the unit or take them off of the unit (e.g. control knobs or plug adapters). They could swallow the parts and choke. Never allow children to operate electrical units unsupervised.
-

**Danger to hearing**

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 unit and never place your ear directly on the speaker.
 - Particularly when the subwoofer has been set to maximum volume and the unit is activated, very high noise pressure may suddenly be produced. This may have psychological consequences and also cause physical injury. Children and pets are particularly at risk. Set your signal source unit volume control to a low setting before turning on the power,
-

Danger Danger of chemical burns!

Leaking battery acid may lead to chemical burns.

- Do not allow battery acid to come into contact with skin, eyes or mucous membranes. In case of contact with acid rinse the affected locations immediately with plenty of plain water and (if necessary) see a doctor.
-

Danger Danger of injury/damage!

Incorrect location may result in damage.

- Never use the unit unmounted in vehicles, in instable locations, on wobbly stands or furniture, with attachment fixtures that are too small etc. The unit could topple over or fall, injuring persons or causing damage to the unit itself.
 - Set up the speakers so that there is no risk of them tipping over and the cables don't represent a tripping hazard.
 - Ensure that any wall mounting is performed in a professional manner.
 - Only use suitable wall brackets for mounting. Check the carrying capacity of the walls.
 - Do not place the unit near sources of heat (e.g. heaters, ovens, other heat generating equipment such as amplifiers etc.).
-

Attention Fire hazard!

Improper use may lead to damage or fire.

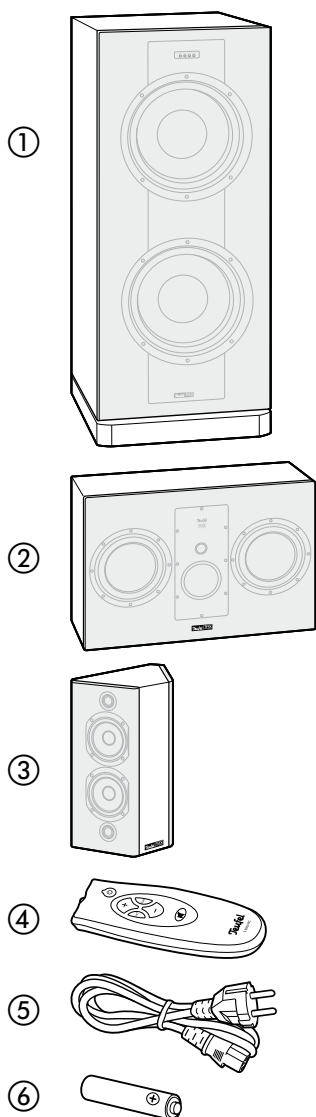
- Do not place open flames such as burning candles or similar on the unit.
 - Ensure sufficient ventilation.
 - Do not place the unit in direct sunlight.
 - Do not cover the ventilation slots with curtains, cloths, newspapers or similar. Heat build-up inside the unit can shorten the lifetime of the unit.
-

Attention Risk of damage!

Power overload due to lightning strike may damage or destroy the unit.

- If the unit is to be left unsupervised for a long period (e.g. during a holiday), or if a thunderstorm is forecast, disconnect it from the mains power supply.
-

Overview



Product contents

- ① 1 x active subwoofer
- ② 3 x front speakers
- ③ 2 x dipole rear speakers
- ④ 1 x remote control
- ⑤ 1 x power cord for subwoofer
- ⑥ 2 x battery for remote control

* The Concert Set 5.1 does not contain any two separate dipole rear speakers, but five identical front speakers.



Connector cables

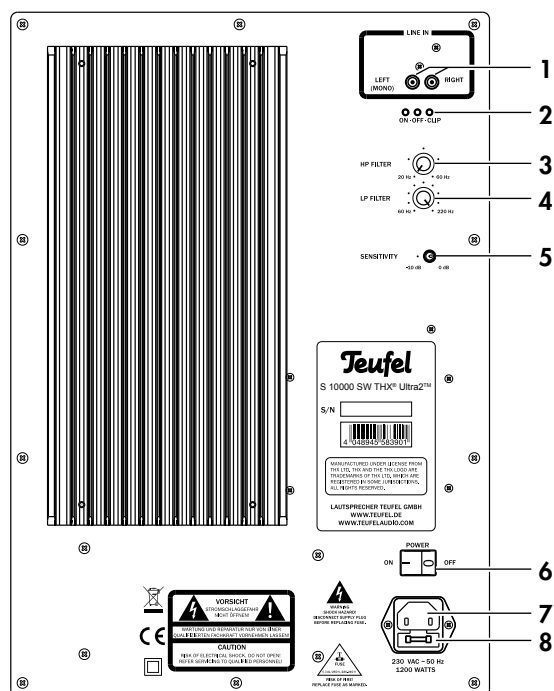
Due to differing customer requirements, the System 10 THX Series system is shipped without connector cables. You can find suitable cables in our webshop (www.teufelaudio.com) in the "Accessories" area. You can also purchase support feet for the speakers there.

Check to be sure

- Check that all items have been delivered and that nothing is damaged.
- If the delivery is incomplete or you find damage sustained in transit, do not operate the unit but contact our service department (see page 3).

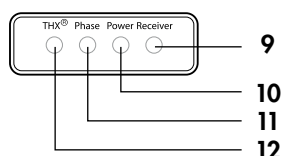
Control elements and connections

Subwoofer back side



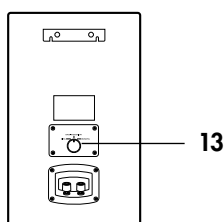
Pos	Name	Description
1	Line In	Audio input jacks
2	On • Off • Clip	Power LEDs On: Subwoofer on Off: Subwoofer off/overloaded Clip blinks: Input is overloaded Clip illuminated: Speaker protective circuit has been triggered
3	HP FILTER	High pass filter
4	LP FILTER	Low pass filter
5	SENSITIVITY	Sensitivity
6	POWER	Mains switch
7	–	Connector jack for power cord ⑤
8	–	Mains fuse

Subwoofer front side



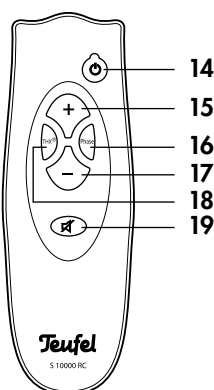
Pos	Name	Description
9	Receiver	Infrared receiver for remote control
10	Power	Power LED: Red = Standby, Green = Operation
11	Phase	Green = Phase shifting active
12	THX	Red = Volume corresponds to THX requirements

Rear speakers back side



Pos	Name	Description
13	–	Switch bipole/dipole/monopole

Remote control



Pos	Name	Description
14	⏻	Turn the subwoofer on or to standby
15	+	Increase subwoofer volume
16	Phase	Activate/deactivate phase shifting (180°)
17	–	Reduce subwoofer volume
18	THX®	Set the subwoofer volume to the THX level
19	🔇	Mute the speakers

Remote control

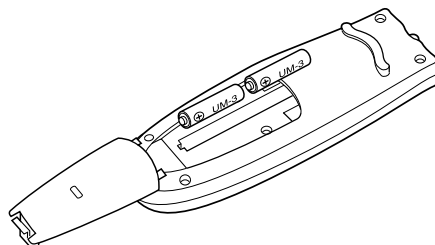
In order to operate the remote control, you will need two type AAA micro batteries with 1.5 volt (included in the product contents).

Inserting batteries

- Push the small lever on the cover of the battery compartment on the back of the remote control and remove the lid by lifting it off upwards.
- If applicable, remove any old batteries (please observe the notes on page 14).
- Insert the batteries in the battery compartment as shown in the figure.
- Place the cover back on the compartment and push it closed.

Functionality

The remote control transmits infrared control signals. To do so, it is necessary that you point the remote control towards the front of the subwoofer. Ensure that no objects are in the way of the infrared signal.

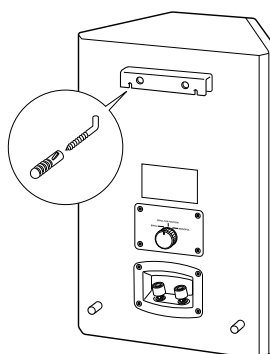


Assembly

The brackets on the back side (see graphic) are used for mounting the rear speakers on a wall.

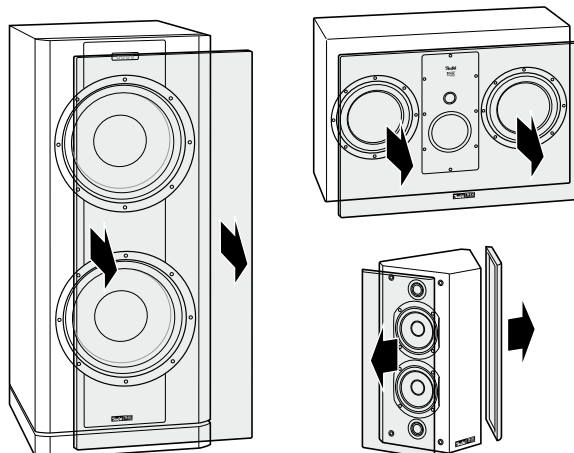
Threaded holes are located on the bottom side for mounting the front speakers on a speaker stand.

You can purchase mounting materials specially designed for these speakers (cords, speaker stands and resonance dampers) in our webshop (www.teufelaudio.com) in the "Accessories" area.



Cover grill

The cover grills protect the sensitive speaker membranes and do not affect the sound. Depending on your taste, you can simply pull the grids off to the front and then put them back on the same way.



Setup

Location tips

- Select a stable, level base.
- Make sure that the environment is clean and free from dust.
- Avoid placing the unit close to sources of heat or in direct sunlight.
- Do not place any heavy objects on the cables or the speakers.

The following specifications concern an “ideal home cinema”, in which the viewer and listener respectively sits in a central position at a sufficient distance in front of the television and screen respectively (see the adjacent graphic) and no objects (tables or the like) are located in between. Unfortunately, the room, furnishings or one’s partner do not always allow for optimum arrangement.

Modern AV receivers offer a variety of possibilities for electronically compensating losses associated with the arrangement. Generally speaking, the following rule applies: You can always use our recommendations as a base to experiment with what works best acoustically and optically in your home. Let your ears (and eyes) decide!

Center speakers

Place one of the three front speakers ② in a central position, directly under the screen and/or silver screen.

Front speakers

The two remaining front speakers ② are set up or hung to the right and left of the screen at a height of approximately 40 to 120 cm. They 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.

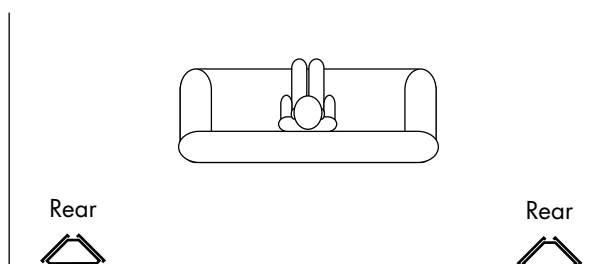
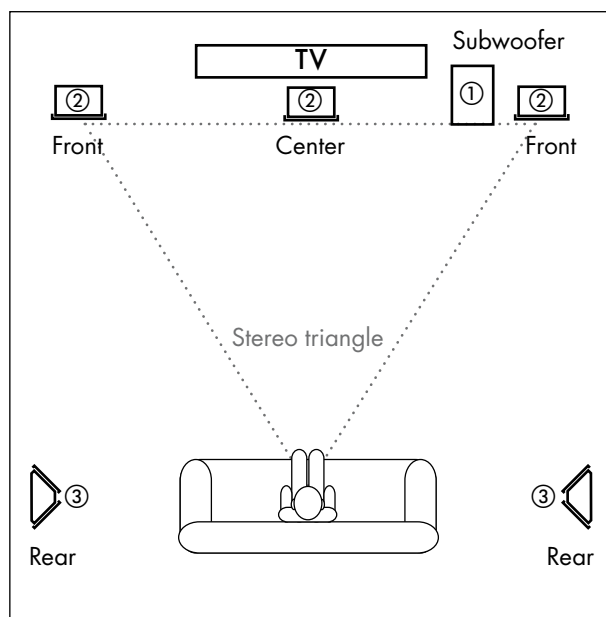
Subwoofer

The location of the subwoofer ① can be freely selected and does not influence the other speakers. However, do not place it in the corner of a room as this may cause uncontrollable frequency overloads. A location between the front speakers is often ideal.

Rear speakers

The two rear speakers ③ project sound at a 45-degree angle towards the front into the room and towards the back against the walls. This way, the speakers produce the desired THX diffusivity. They are set up or hung to the side of the listener and at head level (140 to 210 cm). There should be at least 10 cm of space to the back wall of the room.

You can also set up the rear speakers behind the listener at a height of 140 to 210 cm. Experiment and sample the sound at different distances to determine the ideal distance to the side wall.



Connecting

Danger



Danger of injury/damage!

Arrange the cables so that they do not pose a trip hazard.

- Pull the mains plug of your AV receiver out of the socket to prevent accidental activation.

Subwoofer

- Ideally, the subwoofer is connected to the subwoofer jack of the AV receiver with a mono RCA cable.
- Normally, only the RCA jack 1 "LEFT MONO" on the back side of the subwoofer is used for this purpose.
- The RCA jack 1 "RIGHT" is only occupied if you use a Y adapter for the connection. This increases the subwoofer level slightly.
- You will find more information on this in the operating instructions of your receiver.
- If your receiver does not have a connection for a subwoofer, connect an available speaker outlet with an RCA jack 1 of the subwoofer using a voltage reducer and an RCA cable. We offer voltage reducers on our website in the "Accessories" area.

Speakers

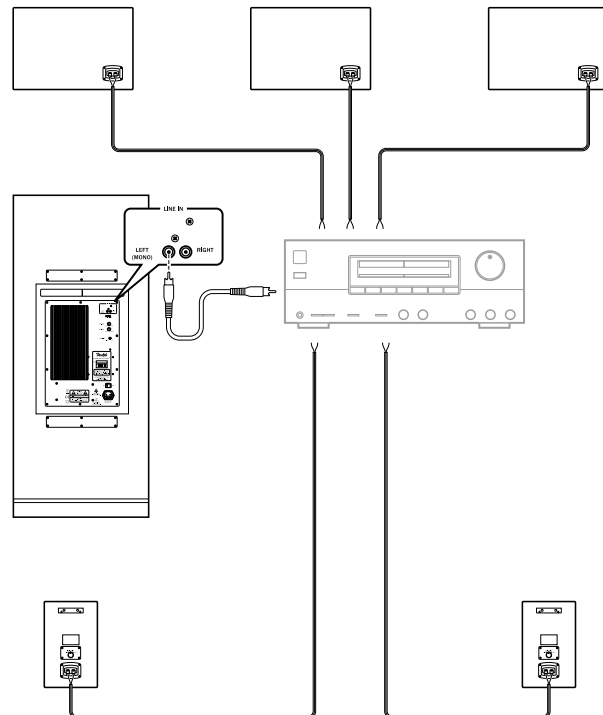
- Lay the speaker cables from your AV receiver to each of the speakers. This cable should be high-quality double-wire speaker cable with marked strands. The diameter should amount to at least 2.5 mm².
Tip: Label the cables on the receiver side – this will help when taking down and setting up the receiver.
- A connector terminal with two terminal clips is located on the back side of each speaker. You can connect the speaker cables directly or using pin plugs. We only describe the direct connection here.
- The terminal clips are each marked red (+) and black (-).



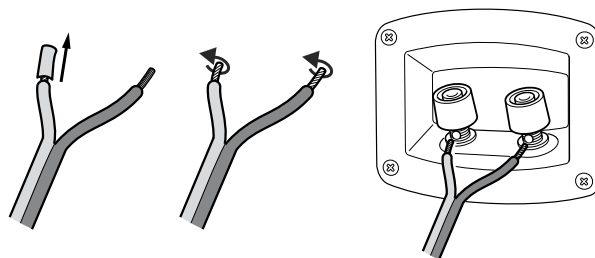
Make sure that the polarity is correct!

Connect the like coloured terminals with one another. Otherwise the sound quality will suffer.

The speaker connectors of your AV receiver should have similar markings. The strands of the speaker cables are marked with different colours or shapes.

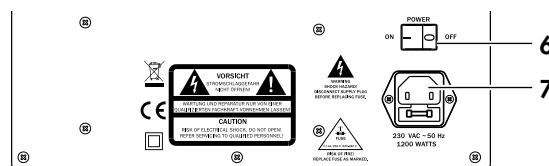


- Split the single wire on both ends up to approximately 30 mm and remove approximately 10 mm of insulation on each piece. Twist the single wire so that no strands are protruding.
- Turn the connector terminal counterclockwise until loose. Run the stripped cable into the hole that is now visible. Turn the terminal clockwise until closed. The cable has now been clamped into place.
- Connect all cables to the speakers in this way.
- Connect the speaker cables to your AV receiver. You will find notes on this in the operating instructions of the unit.



Connecting to a power supply

- Make sure that the mains switch **6** is turned off (position "0").
- Connect the mains connector jack **7** with a mains socket using the mains cord **5**.
- Also plug the mains plug of your AV receiver back into the socket.



Adjusting

Adjusting the AV receiver

Most AV receivers feature a menu with speaker settings (referred to as "Speaker Setup" or the like). If this is the case, you should make the following settings:

- Size of the front, center and rear speakers are set to "normal" or "small" – not "large"
- "Subwoofer" to "on"
- Crossover frequency for subwoofer to 80 Hz
- Volume of the subwoofer to more than 75 %

Set the subwoofer volume to the THX level. For this, push the button **18** "THX" on the remote control while the subwoofer is on. The display **12** "THX" illuminates in red.

These settings ensure that the subwoofer is used optimally and you can do the final fine tuning via the automatic calibration function or the menu of your AV receiver.

Non-adjustable AV receiver

If your AV receiver does not provide the above options, you can make the most important settings directly on the subwoofer. To do so, you will need a CD or DVD with adequate, powerful sound.



Note

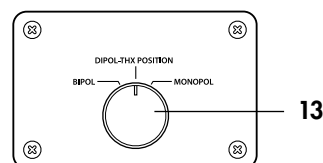
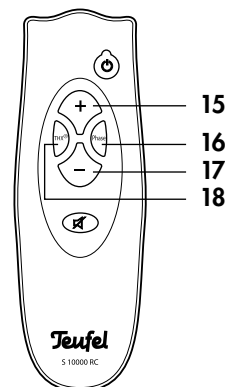
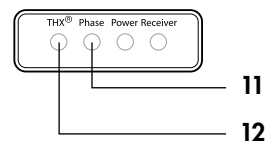
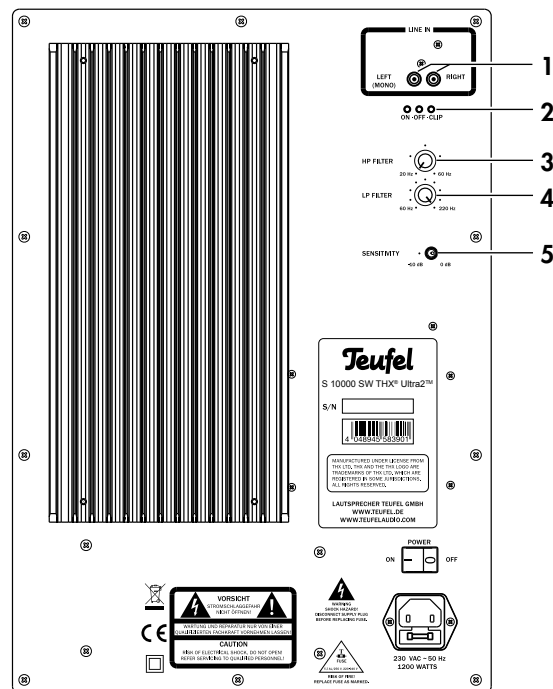
The setting elements on the back side of the subwoofer only work when THX mode is turned off (the display **12** "THX" is off).

- Set the separation frequency with the control **4** "LP FILTER" to approx. 80 Hz (second dash). This way, you specify that the subwoofer only plays sounds up to this frequency (adjustment range: 60–220 Hz).
- With the control **3** "HP FILTER" you can block low frequencies (adjustment range: 20–60 Hz).
- With the switch **5** "SENSITIVITY", soft signal sources can be amplified by 10 dB (switch setting: left).
- Once you have set the best sound, switch phase shifting on and off several times with the button **16** "Phase" (display **11** "Phase" is green). Then select the setting at which the subwoofer sounds as loud and precise as possible.
- Optimise the settings with other CDs/DVDs and different volumes.

Rear speakers

The rotary switch on the back of the rear speakers should normally be set to the intermediate position "DIPOL" (for professionals: the baffle boards then project sound with the phase shift).

If used as a rear center speaker, "BIPOL" must be selected (baffle boards project sound in phase). If two rear center speakers are used, "MONOPOL" is deactivated for each baffle board and the speakers are set up with the silent sides facing one another.



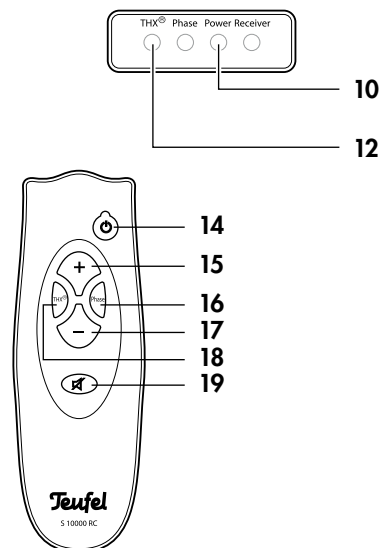
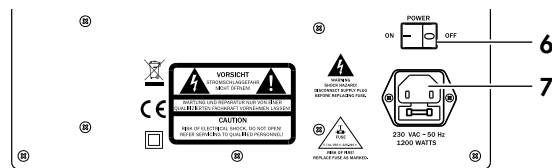
Operation

Activating and deactivating

- With the switch **4** turn the mains voltage on and off respectively. After activation the subwoofer is in standby and the power LED **10** "Power" is red. Once the subwoofer is activated, the Power LED is green.

You can control all other functions with the remote control:

- Turning on or entering standby mode: Push the button **14** "⏻".
- Increasing the volume: Push the button **15** "+".
- Decreasing the volume: Push the button **17** "-".
- Setting the volume to the THX level: Push the button **18** "THX", the display **12** "THX" is red.
- Muting the subwoofer (mute): Push the button **19** "⏻". The Power LED **10** "Power" blinks green.
- Reactivating the sound: Push the button **19** "⏻" again or change the volume.



Care and cleaning

Clean the subwoofer and the satellites regularly with a soft, damp microfiber cloth. In the process, be sure to observe the following notes:

Danger Risk of electric shock!



In contact with live parts, water can lead to electric shock or short circuit.

- Make sure that no liquid penetrates the unit.
- Disconnect the mains plug before cleaning.

Attention Risk of damage!

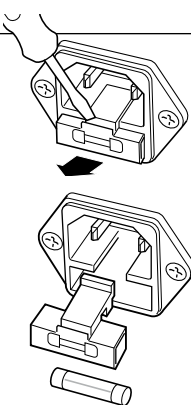


Using the wrong cleaning materials may damage the delicate surface of the case.

- If possible only use plain water without any cleaning products. In case of stubborn marks, a mild soap solution may be used.
- In no circumstances should caustic cleaning products, white spirit, thinners, petrol or similar be used for cleaning.

Troubleshooting

The following notes and further detailed **information on our website** should help you to rectify malfunctions. If this does not lead to success, please contact our hotline ☎ 00800 - 200 300 40 (free of charge). Please also observe the warranty notes.

Problem	Possible cause	Solution
The subwoofer isn't active, the Power LED 10 "Power" is not on.	The subwoofer is off or doesn't have any power.	Turn the switch 6 on ("I"). Check the mains cord and socket.
	Fuse is defective.	Replace the fuse: Disconnect the mains cord. Carefully pull out the fuse holder 8 on the mains connection jack 7 . Push the old fuse down and out. If necessary, insert a new fuse (6,3 AL delay-action) and close the holder. 
The subwoofer is not working but the Power LED 10 "Power" is green.	The volume has been set too low or the mute function is on.	Increase the volume with the button 15 .
The subwoofer hums.	The subwoofer is connected to another circuit than the rest of the system.	Connect the subwoofer and AV receiver to the same circuit.
	The buzzing is caused by problems with the power supply.	Buy a line filter and connect both units to it.
	The buzzing is caused by a multi-outlet power strip.	Use another multi-outlet power strip or plug the subwoofer directly into the wall socket. It may help to insert the plug into the socket the other way round.
Playback is noisy.	Generally speaking, the 10 THX system is a very low-noise system. In the high range area, very good-quality high-resolution speaker systems can expose the poor quality of a signal source (e.g. from MP3 files).	Ensure that the source is sending a clean signal.
The sound seems dull.	Satellite has been connected with incorrect polarity.	Make sure the speaker cables of all satellites are connected properly.

Protecting the environment

Batteries and rechargeable batteries



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

Every consumer is required by law to bring all batteries and rechargeable batteries, whether they contain harmful substances*) or not, to a collection point run by the communal authority or borough or run commercially, so that they can be disposed of in an environmentally friendly manner.

Please only hand in fully discharged batteries!

*) labelled: Cd = cadmium, Hg = mercury, Pb = lead

Disposing of the unit



Used units must not be disposed of with household waste

If the unit is no longer operational, every consumer is required by law to dispose of used devices separate from household waste, e. g. at a collection point run by the communal authority borough. In this way, used devices can be recycled and waste materials disposed of in an environmentally friendly manner.

For this reason, electrical equipment is labelled with the displayed symbol

Technical data

Front/center speakers

Power handling:	Longterm 540 W/shortterm 720 W
Impedance:	4–8 Ohm
Dimensions (W x H x D):	650 x 445 x 235 mm (without cover grills)
Net weight:	23.7 Kg


Rear speakers

Power handling:	Longterm 130 W/shortterm 180 W
Impedance:	4–8 Ohm
Dimensions (W x H x D):	304 x 466 x 200 mm
Net weight:	7.4 Kg

Subwoofer

Operating voltage:	230V~/50 Hz
Output power:	750 W
Max. power consumption:	1200 W
Dimensions (W x H x D) in mm:	500 x 1268 (including wheels) x 540 (590 including plugs)
Net weight:	85.1 Kg

Technical changes reserved!

 This product conforms with Council of the European Union guidelines 2004/108/EC and 2006/95/EC.



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

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10783 Berlin (Germany), Buelowstr. 66

Tel.: 00800 200 300 40 (toll-free)
Fax: +49 (0)30-300 930 930
www.teufelaudio.com

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