



Concept E Magnum POWER EDITION

Fully active PC/Multimedia/Home Cinema System
with 6-channel amplifier and remote control

Teufel

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Lautsprecher Teufel GmbH
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Safety information

Please read the following safety information carefully.

*Risk of suffocation - keep packaging materials (e.g. the plastic bag) out of the reach and sight of children.
Risk of electrocution - do not leave children unsupervised with electrical appliances!*

In case of emergency:

If any of the following occur disconnect the appliance from the mains and consult our technicians:

- ▶ If the plug or cable is damaged
- ▶ If foreign bodies or liquid have entered the appliance,
- ▶ If the appliance has been in direct contact with rain or other water,
- ▶ If the appliance does not play, even if you have followed the instructions for use
- ▶ If the appliance has been dropped or damaged in some other way.

We cannot accept any responsibility for incidences that occur because safety information has not been adhered to.

Warning:

*Inappropriate replacement of the battery may cause explosion.
Replace only with batteries of same type.
Do not expose the battery to excessive heat such as sunshine or fire.*

Important: Please read through these operating instructions very carefully. It is essential that you take note of all of the safety information and operating instructions before switching on the appliance. Please keep these operating instructions in a safe place for future reference.

Important: Please read the operating instructions. You should then also follow all instructions for start-up and ongoing use.

Information on cleaning: Please do not attempt to clean the appliance using household chemicals because they could damage its surface. Simply use a dry cloth. Disconnect the appliance from the mains before cleaning.

Caution - moisture and sunlight: Never operate the appliances in damp rooms, i.e. close to baths, showers, wash basins, drains, damp cellars or swimming pools; never use them where there is moisture. Never expose the speakers to high air humidity and avoid direct sunlight. Do not expose device to dripping or splashing water. Do not place objects filled with liquids, such as vases on the device.

Information on location: Do not use the appliance uncured in vehicles, in unstable places, on wobbly tripods or furniture or supports that are too small. The speakers could fall and cause damage to people, including yourself. Speakers, particularly if positioned on stands or on the TV/monitor, may fall and cause damage/be damaged due to their weight, even if they have been positioned securely and stably, as a result of external influences (pulling on the cable, tripping over the cable, unintentional physical contact). This also applies to wall supports that have been attached inappropriately or incorrectly to walls that may not be capable of supporting their weight. Only use suitable wall brackets for mounting. Make sure that you know how much weight the walls can bear. The appliance must not be placed near sources of heat. This includes radiators and heaters, ovens and other appliances that emit heat (e.g. amplifiers). Sources of heat, such as fan heaters or candles, should not be placed on the speakers.

For ventilation: Slits and openings in the case have been provided for ventilation. Their purpose is to guarantee reliable operation and to prevent the appliance from overheating. These openings must not be blocked or covered, including by placing the appliance on a bed, sofa, carpet or other soft surface. Do not place any newspapers or table cloths, etc. on the appliance. The cooling plate of the amplifier electronics must not be covered or exposed to direct sunlight. Additional active cooling of the appliance is generally not permitted.

Electrical supply: The subwoofer must only be supplied from a power source with the correct voltage as specified on the identification label. If you are unsure about the electricity supply in your home, please contact us or your electricity supplier for more information. The appliance does not need to be earthed. Please only use the appropriate mains cable for connecting to the mains socket. This mains cable must not be modified under any circumstances. Regulations on polarity and earth connection must be adhered to. Use only an appropriate mains plug for receiving the mains cable.

Information on wiring: Please place the supply cable flat and flush to the wall and floor. Cables that are laid loosely represent a risk of tripping. This could also result in interference and cause the sound to be disrupted. The electricity supply cable should be laid so that it is not likely to be stepped on or squashed from the sides or above by heavy objects. Damaged cables must be replaced. Pay particular attention to the cable/plug connection, the mains socket and the cable output from the subwoofer. The power supply cable and the cables

that connect the speakers should be checked regularly for insulation faults or breaks. If a fault is discovered, the appliance and the cabling must be disconnected from the mains immediately and the defective cable must be replaced.

During periods without use: Remove the subwoofer's power supply cable from the socket for longer periods of absence or non-use.

During thunderstorms: In order to avoid damage caused by lightning strikes, the appliance should be switched off and also detached from the mains socket as soon as a thunderstorm is expected.

Risk of overload: You should not overload wall sockets, extension cables or integrated appliance sockets, because this could potentially lead to short circuits and even fires. You should also avoid turning up the volume very high even on the appropriate amplifier, especially if you have increased the bass using the bass control, the loudness button or one of the deep bass boost switches.

Foreign bodies and liquids: Foreign bodies and liquids must not get into the appliance via its openings under any circumstances, because they could come into contact with parts carrying high voltage, which could then cause short circuits and fires. Therefore do not spill any liquids of any kind on the appliance. Troubleshooting: Do not attempt to repair the appliance yourself. Contact our service department first for authorisation if you think that you can repair the fault yourself. Otherwise the appliance must be sent in for testing.

Transport: The appliance should be transported using a hand truck. Great care must be taken during transport. Please note that uneven surfaces, sudden stopping or inappropriate exertion of force may cause the hand truck and the load to fall over.

Information on spare parts: Lautsprecher Teufel will provide you with spare parts during the warranty period. Your warranty will not be invalidated if you replace the parts yourself on-site using Lautsprecher Teufel spare parts.

Unusual sounds: If any unusual sounds occur during use or the sound becomes distorted, the speaker output must be reduced immediately so that the system plays an undistorted sound.

Connecting and changing the fuse: Disconnect the mains plug. A faulty fuse may only be exchanged for one of the same type.

Information on volume: Very high volume can damage hearing. Sudden high sound pressure may be created, particularly if a subwoofer in "Standby / Auto On" mode is switched on by a bass impulse at full volume. In addition to physical damage, please be aware of possible psychological consequences. Children and pets require particular care. If necessary, set the volume control of your signal source appliance to the lowest level. When the volume is high always keep a certain distance from the appliance and never have your ears right next to the speaker.

Introduction Concept E Magnum Power Edition

Dear Lautsprecher Teufel customer,

Thanks for buying the Concept E Magnum Power Edition. With this box set from Teufel you have bought a fully miniaturised multimedia home entertainment system that, despite its extremely compact dimensions and subtle speaker design, delivers excellent sound quality.

This set can be operated either with a multichannel AV receiver/amplifier (partially active) or independently, without an additional amplifier (fully active) through a PC or DVD player with decoder. Stereo sources, such as MP3 players, satellite receivers, TV sets, games consoles, CD players or DJ mixers, can also be used very successfully with the Concept E Magnum.

The Concept E Magnum subwoofer has six integrated power amplifiers. One for the bass speaker and five for the satellites. There is an analogue 5.1 input on the back for direct connection of compatible sound cards, DVD players or receivers with subwoofer/pre-out output.

Because the set-up has a decisive influence on the sound characteristics of any surround system, we recommend that you take the time to position all of the speakers correctly. These operating instructions contain all of the information necessary for the correct setting up and operation of our Concept E Magnum home cinema set.

Before operation please read these instructions carefully and store them in a safe place for future reference. We recommend that you keep the packaging.



*Concept E Magnum
Power Edition
with optional feet*

*Please take a note
of the serial number
and invoice number*

Please take a note of the serial number that can be found on a sticker on the box and the invoice number here:

My **INVOICE NUMBER** is:

.....

My **SERIAL NUMBER** is:

.....

The serial number and the invoice number make it easier for us to process your request quickly if you require service.

If you encounter difficulties during operation or if you think that there is something wrong with the appliance, please read the "Frequently Asked Questions" category on pages 18 to 21 carefully. You can find answers here to the most frequently asked questions.

Teufel

Unpacking • Contents

First please check that the system is complete.

Unpacking

Fold back the flaps on the top of the box, remove the polystyrene and carefully lift each loudspeaker out of the box.

Contents:

- ▶ 1 x Concept E Magnum subwoofer CEM 500 SW with integrated 5.1 amplifier
- ▶ 1 x Concept E Magnum Center speaker CEM 50 C
- ▶ 4 x Concept E Magnum satellite speakers CEM 50 FR (identical models for use as 2 x front speakers and 2 x rear/surround speakers)
- ▶ 1 x Concept E Magnum remote control incl. batteries
- ▶ 1 x mains power cable



◀ Subwoofer and remote control



◀ Centre speaker



◀ Satellites

Accessories

Connection cables or subwoofer casters are not included because of differing customer requirements. You can, however, order any required accessories directly from us. All optional accessories for the Concept E Magnum Power Edition can be found on the following page.

Accessories (optional)

Teufel voltage reducers



Specially developed cable adapter from Teufel. Allows the Concept E Magnum to be connected to amplifiers/receivers that do not have specific subwoofer outputs, but only standard speaker outputs (e.g. older stereo amplifiers). A speaker cable [+] and [-] is adapted to a cinch jack. You will need two for stereo amplifiers.



M50 P speakerstand

Bases developed specifically for Teufel Microsatellites. The speaker cable is hidden inside the base.

Height:

Adjustable between 80 and 120 cm.

Design:

Metal, silver or black. They are delivered as a pair.

Teufel cable packages



We have complete cable packages which make it easy to connect the Concept E Magnum to your source appliance.

There are a range of sets, with different types and lengths of cables.

AC 2005 WS

3 x stereo cinch cables for DVD player/decoder station plus 20-metre speaker cable

AC 3005 WS

3 x stereo cinch cables for DVD player/decoder station plus 30-metre speaker cable

AC 2015 WS

3 x stereo cinch → mini-jack cables for sound cards plus 20-metre speaker cable

AC 3015 WS

3 x stereo cinch → mini-jack cables for sound cards plus 30-metre speaker cable

Teufel mono cinch cable



Specially developed subwoofer cinch cable – the best way to connect our active subwoofer to your receiver or amplifier. Protected against interference from other sources. Stable, gold-plated plugs ensure reliable contact. The cable is available in graded lengths, so the subwoofer really can be placed anywhere.

Microlock wall bracket



The ideal wall bracket for micro satellites from the Teufel Concept System. Allows unobtrusive and secure mounting on ceilings, sloping ceilings or walls. The wall brackets are available in black or silver, but only come in pairs.

Wall mounting

Wall mounting of satellites



The satellites can be attached to a wall with screws by means of the “keyhole openings” on the rear. You will need the Microlock wall bracket for flexible wall mounting for

horizontal or vertical movement.

You can order the accessories shown here from Teufel online at: www.teufel.eu

Set-up as a PC system

General information on configuration

Because of its compact size and pleasantly unobtrusive design, it's easy to integrate the Teufel system harmoniously into your home. For surround sets there are some set-up criteria you need to observe, in order to get the best sound from your Teufel speakers.

The set-up instructions that we recommend on the following pages show the ideal set-up for perfect multichannel reproduction in your home. Your available space, your partner or furniture may not always permit such ideal placement. Try to meet as many requirements as possible. Modern AV receivers and DVD players or the sound-card software of a PC offer lots of opportunities to electronically compensate for any restrictions in the set-up. Generally speaking, the following rule always applies: You can always use our recommendations to experiment with what works best acoustically and optically. Let your ears (and eyes) decide!

Setting up the Concept E Magnum Power Edition as PC system:

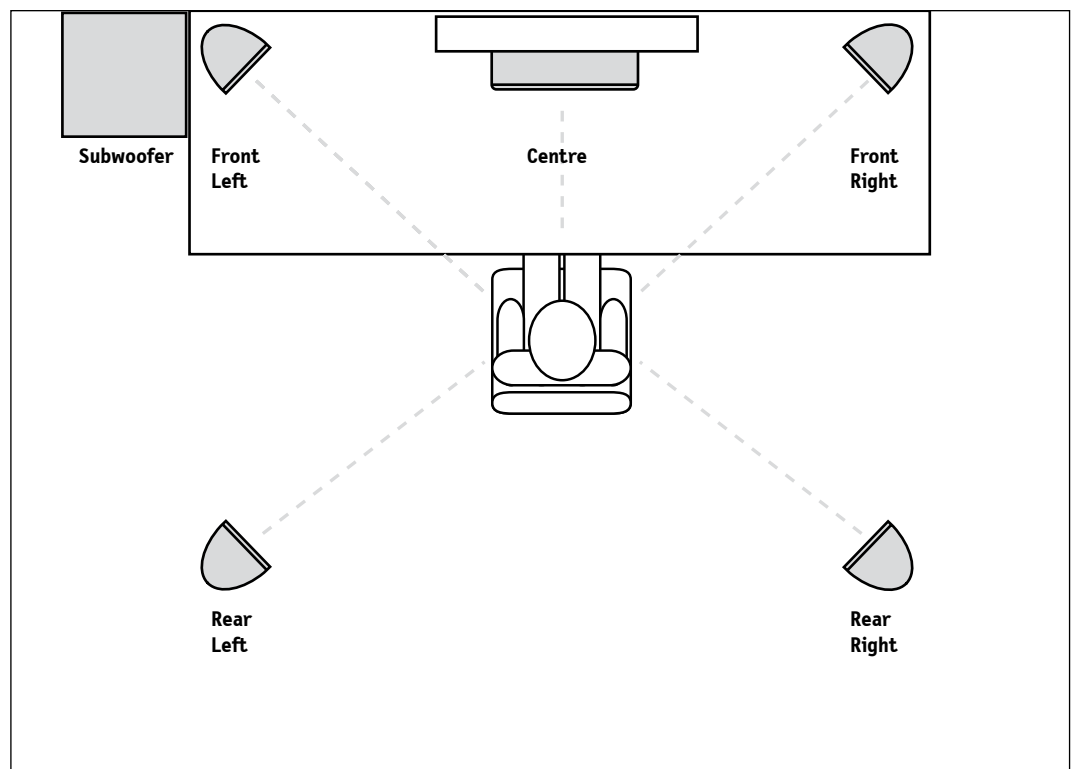
When using the Concept E Magnum as a PC sound system, it is advisable to focus on the sound requirements of the PC workplace, i.e. the area where the screen and receivers are located.

Because the centre reproduces actors' dialogue, this speaker must be positioned as centrally as possible under/over/next to/on top of the monitor and inclined or angled towards the listener. The front speaker is attached next to the monitor at the same distance from it or the reception area left and right or attached to the wall. Attachment at ear height is optimal, but anything in the range between 0.80 and 1.60 metres is acceptable. If the values are outside of the recommended range, you can slightly tilt the front speaker.

The location of the subwoofer is freely selectable and does not affect the other speakers. Placement within a straight line between the two front satellites is often ideal.

The rear speakers should be placed behind the reception area to reflect the front speakers – ideally at the same level.

Example set-up of a Concept E Magnum Power Edition for use as a PC sound system.



Imperfect placement because of different distances and heights can be compensated for in the setting options of the sound card's control software.

Set-up as a home cinema system

Setting up the Concept E Magnum

The Power Edition as a home cinema system:

When using the Concept E Magnum as a home cinema system, we recommended that you focus on the section of the room where the TV and seats are located. It is useful to position the screen as centrally as possible, from the perspective of the viewer/listener.

Because the centre reproduces actors' dialogue, this speaker must be positioned as centrally as possible under or over the TV and inclined or angled towards the listener. Using the old stereo tradition (distance to listener = distance between the left and right speaker), the front speakers are set up next to the TV with the same distance to left and right or fixed to the wall. The MP 50 speakerstand can also be used, or alternatively the Microlock wall bracket. Using the base automatically guarantees optimum playback height for satellite boxes. The Microlock allows horizontal or vertical alignment to the listener.

The following apply to wall or shelf placement:

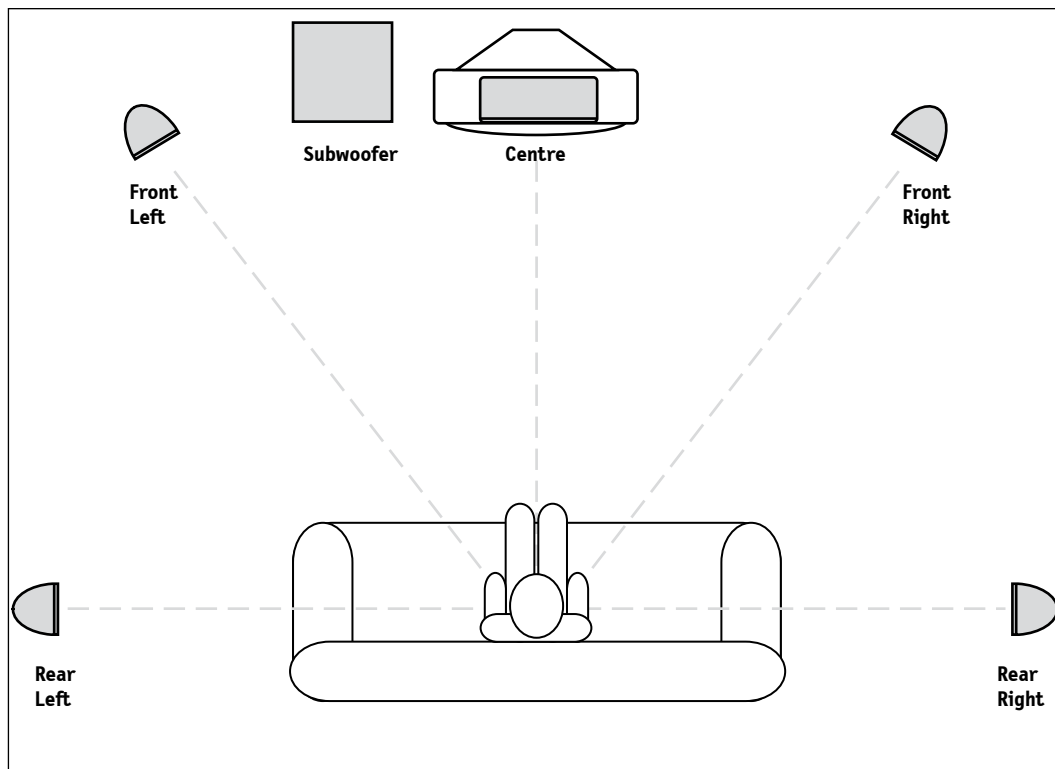
The set-up heights should be between 40 centimetres and 1.20 metres. If the values have to be outside of the recommended range, you can slightly tilt the front speaker towards the reception area. It is important that the centre and main speakers are placed in an even arc, possibly slightly curved towards the TV.

The location of the subwoofer is freely selectable and does not affect the other speakers.

Placement within a straight line between the two front satellites is ideal.

The rear speakers should be placed behind the reception area to reflect the front speakers – ideally at the same level. If higher or lower attachment is necessary, try to compensate by inclining/tilting the speakers.

We recommend that the distance between the rear speakers and the reception area is greater than 1.00 m. However, if you (have to) sit closer, then make sure that the front of the box is not directly facing you, but that it faces into the room.



Example set-up of a Concept E Magnum Power Edition used as a home cinema

Imperfect placement because of different distances and heights can be compensated for using the setting options in the AV receiver's speaker management settings.

Connection to 5.1 sound cards

Connection to a 5.1 sound card



The Concept E Magnum is perfect for direct connection to any computer. If your sound card is set up for 5.1 operation, you will usually find three 3.5mm mini-jack outputs. Connect the card, using three adapters (3.5mm mini-jacks on 2 x cinch) to the inputs for the front R/L, rear R/L, centre and subwoofer on the reverse of the Concept E Magnum. The colours of the outputs and the types of signals transferred at each output differ from sound card to sound card. Please refer to the handbook for the soundcard. The Teufel system then reproduces the surround signal decoded by the sound card.

Sound card settings are described in detail on page 14.

Connecting the satellites



The five satellites are connected directly to the speaker clamps on the subwoofer, using a speaker cable.

Strip and split the ends of the speaker cable as shown. Speakers and amplifiers have corresponding [+] and [-] clamps. The [+] cable of the speaker cable is marked with a stripe. It is important that you observe the correct polarity when connecting the speakers: the plus pole of the speaker to the plus pole of the amplifier and the minus pole of the speaker to the minus pole of the amplifier. Connecting the cables with the incorrect phases can result in thin sound, weak bass and reduced stereo characteristics. For multichannel surround systems, too, it is important that all speakers are connected with the correct polarity in order to ensure an appropriate three-dimensional atmosphere and the correct alignment of the sound.

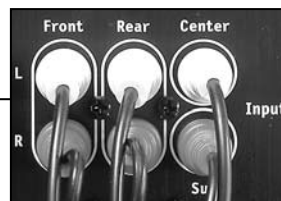
Information:

You can find out about the speaker sockets in the instructions for using your sound card.



PC with 5.1 sound card

Example connection of a 5.1 sound card



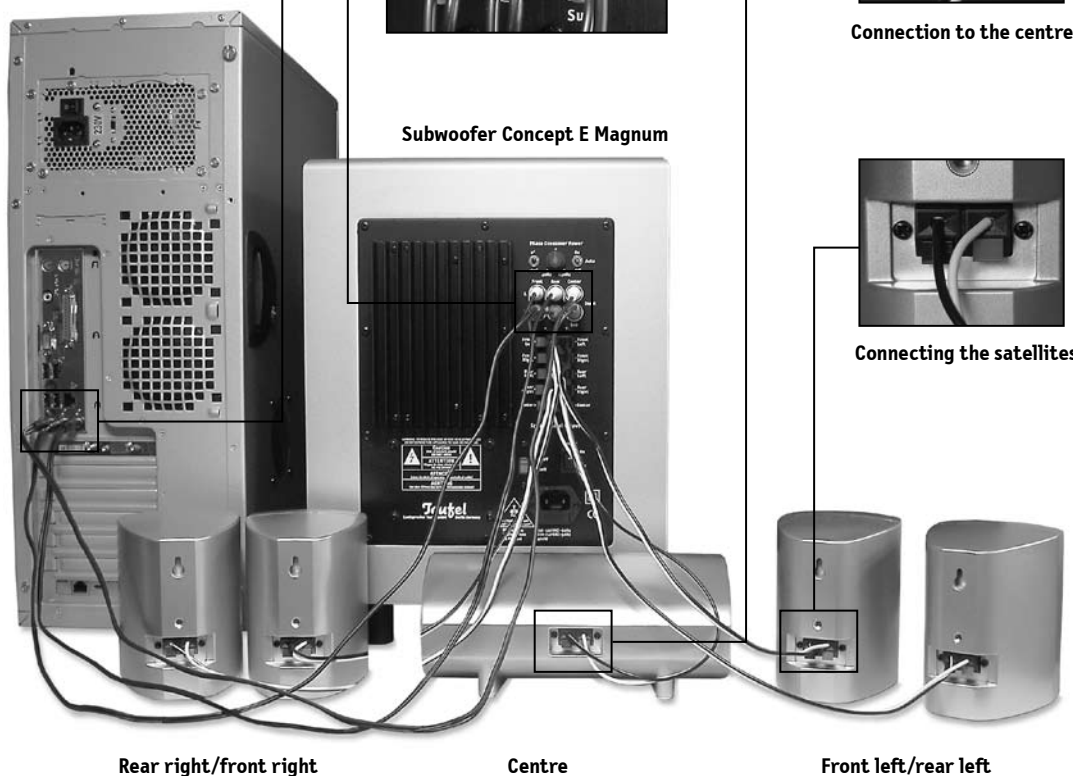
Subwoofer Concept E Magnum



Connection to the centre



Connecting the satellites



Rear right/front right

Centre

Front left/rear left

Connection to stereo sources

Connection to a stereo sound card



If your sound card only has a single 3.5mm stereo jack output, connect it using a 3.5mm mini-jack cinch adapter to the front input "In R/L" on the subwoofer. Thanks to the integrated "upmix" function in the Concept E Magnum, the 4 satellite speakers reproduce a stereo signal and the centre speaker and the subwoofer each reproduce a mono signal. This admittedly doesn't sound as perfect as Dolby Digital, but does sound better than pure stereo reproduction. Later you will also still have the chance to operate your speaker using a retrofitted 5.1-capable sound card, in order to experience the full pleasure of Dolby Digital and DTS.

Connection to a notebook/laptop



You can use the Concept E Magnum to create perfect PC sound, not only on a desktop computer but also with a notebook. If you want to control the Concept E Magnum using a notebook, it is connected using a stereo cinch cable. Connect the stereo output of your portable computer using a 3.5mm mini-jack to the stereo cinch adapter with the front left/right inputs in the rear connector panel of the subwoofer. All five satellite boxes are connected to the subwoofer via the speaker cable. The subwoofer now produces a mixed signal for all speakers. With this type of connection, the four satellites reproduce a stereo signal and the centre and the subwoofer reproduce a mono signal. Although it is not a flawless Dolby Digital sound, this solution sounds noticeably better than just stereo. For 5.1 reproduction you usually need a notebook-compatible external sound card with six analogue outputs. Different companies offer solutions for connection to the PCMCIA port or via USB or FireWire. If your notebook already offers three analogue mini-jack outputs, please proceed as described in the section "Connection to a 5.1 sound card".

Connection to stereo sources



(MP3 player, satellite receiver, TV set, games console, CD player, DJ-mixer, Discman, Walkman)

You can see here how universally the Concept E Magnum can be used. Our bestseller can be operated successfully with any of the above appliances. And not just in stereo, but also with virtual surround sound, using the integrated "upmix" function that involves all 6 of the Concept E Magnum's speakers. Here's how it works:

Connect the stereo output of your appliance with the front left/right inputs in the rear connector panel of the subwoofer. It is possible to use a 3.5mm mini-jack on a stereo cinch adapter. All five satellite boxes are connected to the subwoofer via the speaker cable. The subwoofer now produces a mixed signal for all speakers. With this type of connection, the four satellites reproduce a stereo signal and the centre and the subwoofer reproduce a mono signal.



The Concept E Magnum Power Edition enables you to experience virtual surround sound from all stereo sources (MP3 player, Playstation, CD player, etc.).

Connection to a DVD player/recorder

Connecting the Concept E Magnum Power Edition to a DVD player/recorder.

The Concept E Magnum can be used not only for direct connection to the PC, but also for direct connection to a DVD player/recorder. It allows you to create a complete home cinema sound system with just two audio appliances!

DVD player settings are described in detail on page 15.

To control the Concept E Magnum directly via a DVD player, the player/recorder must have an integrated Dolby Digital/DTS decoder. This type of equipment can often be recognised by the fact that the DVD player has an analogue 5.1 cinch output at the back (6 cinch jacks for front R/L, rear R/L, centre and subwoofer). The DVD player/recorder is connected directly to the subwoofer with three stereo cinch cables, from the 5.1 cinch outputs of the DVD player to the 5.1 cinch inputs of the subwoofer. The five satellites are connected directly to the speaker clamps on the subwoofer, using a speaker cable.

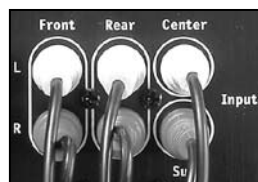
Even if your DVD player/recorder does not have a decoder or six analogue cinch outputs, you can still successfully use the Concept E Magnum.

Connect the stereo output of your appliance using a stereo cinch cable with the front input "In R/L" on the subwoofer. Thanks to the integrated "upmix" function in the Concept E Magnum, the 4 satellite speakers reproduce a stereo signal and the centre speaker and the subwoofer each reproduce a mono signal. This admittedly doesn't sound as perfect as Dolby Digital, but does sound better than pure stereo reproduction. Later you will also still have the chance to operate your speaker using an AV receiver/amplifier, to experience the full pleasure of Dolby Digital and DTS (see page 13).

A selection of suitable DVD players can be found on our website at:

www.teufel.eu

Subwoofer rear side



Connection to subwoofer

Satellite rear side



Connecting the satellites

Centre, rear view



Connection to centre

DVD player, rear view



Connection to DVD player



Rear right/front right

Subwoofer

Front left/rear left

Centre

DVD player

Connection to an AV receiver

Connecting the Concept E Magnum Power Edition to an AV receiver.

The many and varied opportunities for using the Concept E Magnum don't stop with an AV receiver. Although designed to be fully active, the set is partially active in cooperation with an AV receiver. You can connect the Concept E Magnum like a conventional speaker system: the five satellites via the speaker cable to the corresponding speaker outputs front R/L, rear R/L and centre of the AV receiver/amplifier and the subwoofer from the front R input via a mono-cinch cable to the sub out output to the A/V receiver/amplifier.

If the AV receiver/amplifier has preamplifier outputs for all channels (front R/L, rear R/L, centre and subwoofer), the Concept E Magnum can also be connected via three cinch cable pairs to the subwoofer and the satellites via speaker cables to the subwoofer. However, we recommend using the first version.

Please note: The auto on/standby switch only reacts when the front R input is being used! The subwoofer also receives the full subwoofer signal via this channel!

AV receiver settings are described in detail on page 15.

Centre, rear view



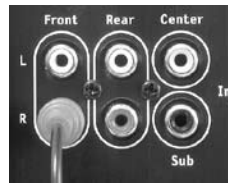
Centre connection

Satellite rear side



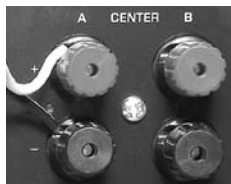
Satellite connection

Subwoofer rear side

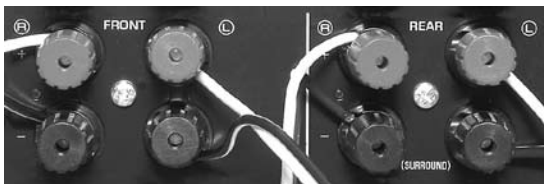


Subwoofer connection

AV receiver rear side



Centre connection



Connection front and rear speaker



Subwoofer connection

Information: In order to guarantee that the automatic on function (auto on) works correctly, the front cinch input (front right) has to be used. The subwoofer input can remain unoccupied.



Rear right/front right

Centre

AV receiver

Front left/rear left

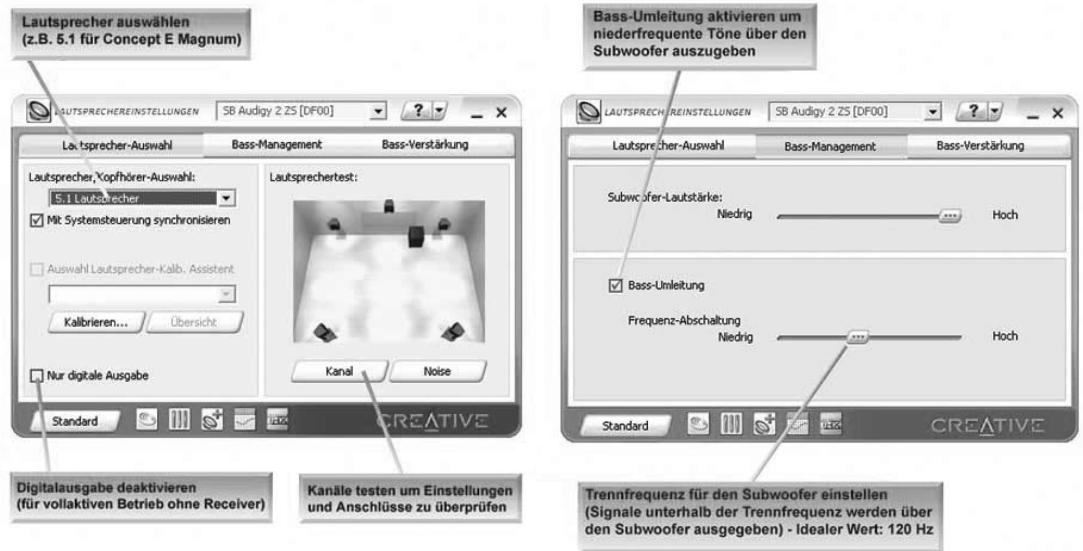
Subwoofer

Sound card settings

Sound card settings

The Concept E Magnum itself does not have a built-in decoder function. Therefore it is “dependent” on the allocation of the external decoders when splitting the signals.

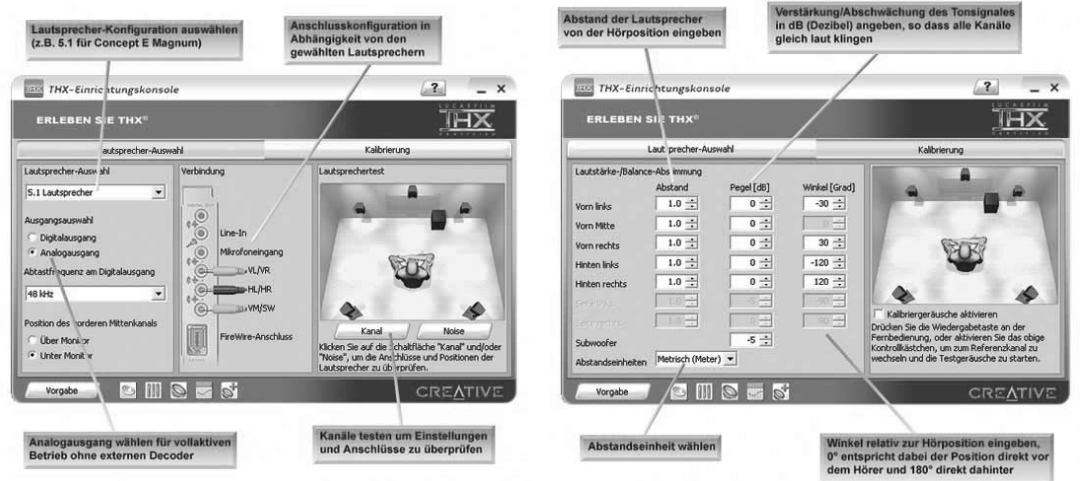
The following illustrations clarify the steps for configuring a sound card (here, using a Soundblaster Audigy 2 ZS) with the Concept E Magnum.



Start-up the “surround mixer” and call up the speaker settings. The connected speaker configuration must be selected in the speaker selection under speaker/headphone selection, in this case a “5.1 speaker”:

In the next step, activate the bass redirection in bass management. The transfer frequency can be set using the sliding control (described here as frequency shut-off). Select the optimum setting of 120Hz.

For perfect equalisation of the speakers we recommend using a volume level measuring device, as available in the Teufel shop. This device is a purchase that will last a lifetime and allows considerably more precise equalisation than the ear. Bass levels in particular are often set too loud – exact adjustment is only guaranteed using a measuring device.



We can now fine tune the system using the “THX setting console”. Using the speaker test, we can control the individual channels and check that the settings are correct.

During calibration, the speakers can now be set directly, taking into consideration the settings and the space available. For each speaker, set the correct distance to the reception area and the angle to the reception area. The volume level must then be equalised over all channels consecutively so that all speakers play at the same volume.

Setting the DVD player • AV receiver

Adjustment to the DVD player with 5.1 analogue output

The Concept E Magnum itself does not have a built-in decoder function. Therefore it is “dependent” on the external decoders to split the signals. This decoder is a component of the DVD player software.

Its set-up options differ greatly from appliance to appliance. Please consult the handbook for your DVD player.



The following basic settings should always be made:

- ▶ Our **front/centre/rear speakers** should be defined in the speaker set-up menu (speaker management/bass management) of the DVD player as “**small**” or “**normal**”.
- ▶ Set the **subwoofer** to “**on**” or “**yes**” on the speaker set-up menu.
- ▶ The optimal **cut-off frequency** is **120 Hz**. 100Hz or 150Hz are also possible.
- ▶ Turn the **frequency control** on the subwoofer itself to “**maximum**”.

Adjustment to the AV receiver

During operation on the AV receiver, the Concept E Magnum is always dependent on the optimal setting of the AV receiver. Only when the receiver’s decoder assigns the signals optimally will all of the boxes of the Teufel speaker set be activated, because the Concept E Magnum itself has no built-in decoder function. The set-up options for the AV receiver differ greatly from appliance to appliance. Please consult the handbook for your AV receiver.



The following basic settings should always be made:

- ▶ Our **front/centre/rear speakers** should be defined in the speaker set-up menu (speaker management/bass management) of the AV receiver as “**small**” or “**normal**”.
- ▶ Set the **subwoofer** to “**on**” or “**yes**” on the speaker set-up menu.
- ▶ The optimal **cut-off frequency** is **120 Hz**. 100Hz or 150Hz are also possible.
- ▶ Turn the **frequency control** on the subwoofer itself to “**maximum**”.

Operating elements on the subwoofer

Explanation of symbols



The arrow-headed lightning symbol in an equilateral triangle indicates the presence of a dangerous uninsulated electrical voltage within the system housing and therefore a risk of electrical shock.



The exclamation mark in an equilateral triangle, as affixed to the appliance, is to make the user aware of important operating and maintenance instructions.



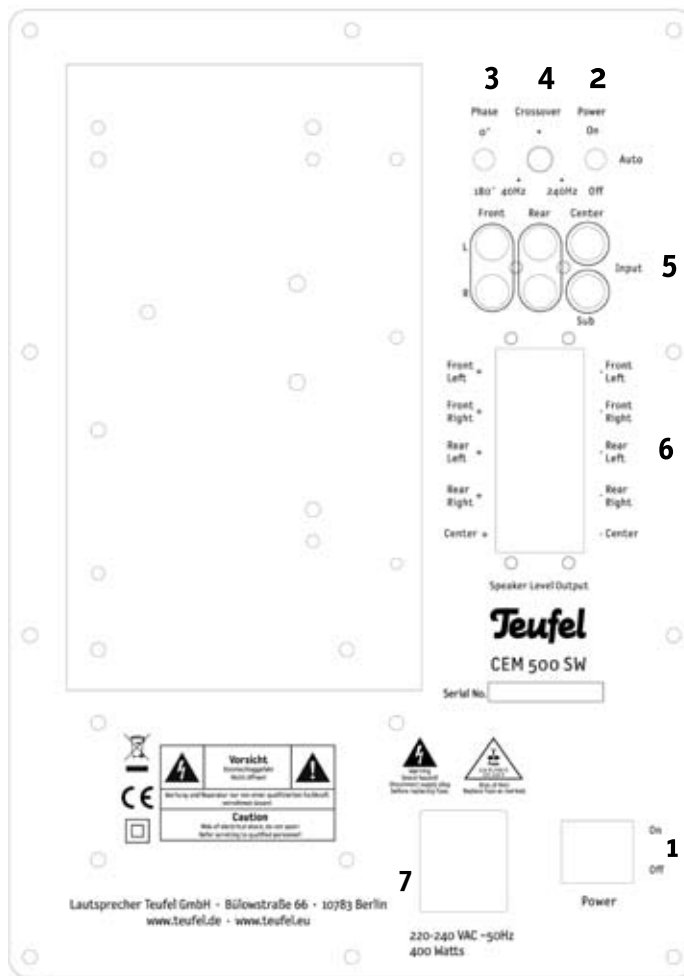
This product complies with European Community guidelines 2004/108/EC and 2006/95/EC.



The dustbin symbol printed on our products' type plates and amplifiers states that Lautsprecher Teufel guarantees proper disposal of these speakers and subwoofers in line with the Electrical and Electronic Appliance Act.



This product complies with DIN EN 61140 (VDE 0140-1) and IEC 60417 of protection class II. It only requires a two-pin round plug (included) and not an earthed plug. The plug has a reinforced or double-shielded casing to prevent electrical shock.



- ❶ Mains power – below
- ❷ Power function – top
- ❸ Phase
- ❹ Frequency
- ❺ Input
- ❻ Speaker level output
- ❼ Fuse

❶ Mains power – below:

When set to “OFF”, the subwoofer is switched off, and on when it is set to “ON”.

❷ Power function – top:

When set to “OFF”, the subwoofer is switched off, and on when it is set to “ON”. If you set the switch to “AUTO”, the subwoofer will switch on automatically when it receives a signal. If it receives no signal, it switches itself off after about 20 minutes.

❸ Phase:

Set the phase positions for your front and centre speakers here. If the subwoofer and the front speaker in approximately the same line, set the phase to 0°, otherwise to 180°.

❹ Crossover:

Here you can set the cut-off frequency at which the subwoofer ends its activity and the satellite speakers start to work.

Use an AV receiver/DVD player or a sound card with corresponding sound configuration software, set the control to the right setting = maximum and select the cut-off frequency of 120Hz on the receiver/DVD player/PC.

❺ Input:

Connect your cinch cable from the playback device (sound card/DVD player/Receiver) here.

❻ Speaker level output:

Connect the speaker cable to the five satellites here.

❼ Fuse:

Under the socket for the mains cable you can find the mains fuse of the subwoofer. If, after switching on mains power (❶), the power lamp on the front side of the device is not lit, please replace the fuse. You can remove the fuse by using a screwdriver.

Before exchanging the fuse it is essential to disconnect the subwoofer from the mains supply. Only replace the fuse for an equivalent one!

Attention:

The separating equipment of this equipment is the mains plug, this separating equipment must be usable without difficulties.

Start-up

Set the mains switch ❶ to “on” to switch on the 5.1 amplifier and use the operation mode switch (“Off/Auto/On”) ❷ to “automatic” mode (middle setting).

If your PC/DVD player is switched off or is not sending output to the 5.1 amplifier, the 5.1 amplifier will be in standby mode. The 5.1 amplifier is automatically switched on when it receives an audio signal. When the signal stops, it will automatically return to standby mode after around twenty minutes.

When the operation mode switch ❷ is set to “On”, the 5.1 amplifier will stay on continually, regardless of whether a programme is running or not.

If you are going to be away for a longer period of time or if the 5.1 amplifier is not being used, switch the mains switch ❶ to “off”. Please note that the volume settings saved on the appliance will be deleted by disconnecting the mains plug or switching off the mains switch ❶.

The “phase” switch ❸ allows you to optimise the “phase” of your amplifier to the different listening positions. For a subwoofer position between the front speakers, we recommend 0°. For a position near the reception area we recommend 180°. If the subwoofer is in a different position, the setting at 180° can compensate for reduced bass reproduction.



Settings with the remote control

It is also possible to make all equalisation settings on the subwoofer of the Concept E Magnum using the remote control. The display field for the settings is located on the front of the subwoofer.

When the system is in standby mode, the LED under the lettering “POWER” will light up red. When the subwoofer is in operation, it lights up green. In this case, the LED under the lettering “MAIN” lights up red at the same time. The system is now ready for operation.

Levelling can be done by remote control or on the subwoofer itself.

Exception: The “MUTE” button is only located on the remote control. Pressing the button once immediately mutes the complete system; if you press it again, the system returns to its previous operating status. When the system has been muted, the LED under the word “MUTE” on the front of the subwoofer lights up continuously in red.

The “CHANNEL” button goes through each of the possible control areas of the subwoofer. Use the [+] and [-] keys to set each required level. You should ensure that all of the speakers located around the reception area achieve the same level. In order to achieve this, it is best to use an equalization measuring device and the sound/signal generator built into the DVD player/AV receiver.

The level set is automatically saved by the subwoofer.

What is shown in the subwoofer display:

MAIN	†	Total volume
FRONT	†	Volume of the front speakers, left and right
REAR	†	Volume of the surround speakers, left and right
CEN	†	Volume of the centre speakers
SUB	†	Volume of the subwoofer

The red LED marks the control area chosen each time.

“The subwoofer is buzzing”

The Concept E Magnum has a powerful transformer and a generously proportioned power pack for high-output performance of 450 watts. These components can create a very quiet, unobtrusive buzzing sound that can be heard a short distance from the back of the subwoofer in quiet rooms if there is no signal present. It cannot be avoided in this price category. During operation this light buzzing will disappear because it is masked by the sound output. On the other hand, if the buzzing can clearly be heard from a distance of more than a metre and/or can also be heard from the satellites, there is possibly a defect, – assuming the subwoofer is not touching other appliances. In some cases, it could come from connection to other appliances, through equalizing currents that are caused by different casing potentials or similar. Please read the following instructions for a solution to the latter case:

1. The subwoofer is connected to a different power circuit from the rest of the equipment. Ensure that all linked appliances (including the PC if connected) are connected to a single power circuit or plug.
2. The aerial connected to the equipment or TV has a different ground potential to the socket. To test this, simply remove all aerial cables from the wall socket. If the interference stops, you need a sheath current filter (available from electronics retailers). It is inserted between the aerial socket and the TV or receiver.
3. A separately purchased mains filter, to which all appliances must be connected, may be useful in eliminating the interference. Please negotiate a right to return for the filter, in case it does not lead to positive results.
4. Occasionally, a multiple socket strip proves to be responsible for creating buzzing noises. To test this, disconnect the plug strip and plug the subwoofer's mains plug directly into a wall socket.
5. You can also try turning the mains plug around and inserting it into the socket the other way up, inasmuch as your mains plug/socket allows this.
6. In order to better localise the cause of the buzzing, check whether the subwoofer operates without buzzing on a power circuit in another room (e.g. using an extension lead). You should also try disconnecting the cinch connection between the subwoofer and the PC/DVD player/receiver in order to exclude the influence of connected components.
7. It can be useful to create an additional earth by fixing a cable (e.g. speaker cable) to the metal screw of the power amplifier and fixing the other cable end e.g. to the heating pipe or PC casing.

Frequently asked questions

“The subwoofer doesn’t start in auto-standby mode – or goes into standby too quickly”

Please check whether the level set in the speaker/bass management for the feed device (DVD player, sound card, receiver) is at a high value of around +4 dB to maximum. The higher this value, the earlier the subwoofer will start. Is the switch on the back of the subwoofer in the middle setting “auto”?

During receiver operation: Is the subwoofer out-cinch cable from the receiver connected to the front in R on the subwoofer?

“There is no sound or distorted sound from one of the satellites – all of the other satellites are working”.

In order to pinpoint the defect more specifically, please swap the non-functioning satellite for a functioning satellite in order to determine whether the defect is in the satellite or the subwoofer. If the previously non-functioning satellite plays on a different channel of the subwoofer, the defect is probably in the subwoofer electronics. If the satellite does not play on a different channel, the satellite is defective.

“There is no sound from the subwoofer – all of the other satellites are working”.

You can check the function of the subwoofer by connecting the subwoofer cinch input on the subwoofer only to the output from one of the front channels L/R front on the sound card or a device such as a portable CD player. If the subwoofer now plays, it could not have been getting the correct signal before. Either the cinch cable is defective or the subwoofer output of your source appliance is not generating a signal.

Alternatively, turn the subwoofer level to “minimum”; remove the subwoofer cinch cable from the PC/DVD player/AV receiver; turn the level up carefully and touch the inner cinch thermistor with your finger. If you can hear buzzing or crackling, there is an error in the PC/DVD player/AV receiver or its settings. If the subwoofer stays silent, please read the following frequently asked questions carefully.

“The subwoofer switches itself off after a long period at high volume (the satellites keep playing)”.

It is possible that you have operated the Concept E Magnum outside of its performance boundaries.

The Concept E Magnum is an extremely good-value, fully active system that performs very well for its class. It has been designed for home cinema use in smaller rooms and for PC use. It should be taken into consideration, especially in fully active operation with sound cards and DVD players, that a PC speaker system cannot fill an entire room with sound, but only where the user is sitting. The system has not been designed for and is not suitable for long-term use at very high volumes.

If the system is operated when the volume is too high, the safety cut-off in the power pack may activate. This safety cut-off switch is prescribed for safety reasons and prevents the power pack, the power amplifiers and the speakers from sustaining damage. When this cut-off switch is activated, it means that the system has reached its performance boundaries.

Our problem-solving tips:

- Position the boxes of the Concept E Magnum nearer to where you are sitting. Then much less power will be needed for loud sound reproduction.
- Use an AV receiver that will supply the satellites with power. This takes the pressure off the power pack and the power amplifiers of the Concept E Magnum.

However, a fault cannot be ruled out if the Concept E Magnum switches off at lower volumes in small rooms of 20m² or smaller.

We are unable to authorize additional active cooling of the power amplifier. It no longer corresponds to the specifications for the operation of our products. Failures caused in this way can clearly be attributed to negligent action by the user. As operation with active cooling has a direct effect on the function of the product, it voids all guarantee claims.

To make sure that the Concept E Magnum is fully functional, please carry out a “basic function test”, as described at the end of the “Frequently Asked Questions” chapter.

Frequently asked questions

“The subwoofer does not play with stereo sources such as music CDs (on PC/DVD player)”.

The Concept E Magnum is purely a reproduction system – it does not have a built-in decoder function. Therefore it is “dependent” on the external decoders to split the signals. This decoder is a component of the sound card or DVD player software.

If the signal only plays on two satellites in stereo mode, for example, the correct allocation in the software of the sound card/DVD player is either not possible or not correctly set.

The Concept E Magnum is “blameless”, because it only reproduces what it receives from signals (and not what it doesn’t receive).

Therefore, correct allocation in the software of the sound card/DVD player is essential.

Please contact the support department of the sound card/DVD player manufacturer.

To make sure that the Concept E Magnum is fully functional, please carry out a “basic function test”, as described at the end of the “Frequently Asked Questions” chapter.

“The rear satellites and/or centre will not play with stereo sources e.g. music CDs (on PC or DVD player)”.

The Concept E Magnum is purely a reproduction system – it does not have a built-in decoder function. Therefore it is “dependent” on the external decoders to split the signals. This decoder is a component of the sound card or DVD player software.

If the signal only plays on two satellites in stereo mode, for example, the correct allocation in the software of the sound card/DVD player is either not possible or not correctly set.

The Concept E Magnum is “blameless”, because it only reproduces what it receives from signals (and not what it doesn’t receive).

Therefore, correct allocation in the software of the sound card/DVD player is essential.

Please contact the support department of the sound card/DVD player manufacturer.

“I can hear background noises that only occur at certain volumes”

When the background noises keep occurring at certain levels in “steps of 10”, the phenomenon you have described is a construction-dependent peculiarity of the Concept E Magnum and not a defect. As you can set the volume yourself using the volume options on your PC/DVD player, instead of using the remote control and the equalizer on the subwoofer, this critical setting point can simply be avoided in everyday life.

“I’m receiving radio/interference signals”

In rare cases it may be possible to receive radio/interference frequencies; this depends on the local environment. Please remove all cinch cables from the subwoofer and check whether the interference still occurs.

We recommend trying out shorter, higher quality, shielded cinch connection cables.

“The satellites crackle”

Please disconnect the Teufel speaker system from your PC or other connected devices by loosening the cable connection and check whether the “crackling” stops. Try operating the set with a different power source/in a different room (just use an extension cable). If you can still hear the crackling, please check which satellite is affected by swapping them over and finding out whether it is the satellite or the subwoofer electronics that are generating the excessive crackling. If the fault “moves” with the satellite, the satellite is affected. On the other hand, if the crackling is still on the same channel, the subwoofer amplifier electronics are responsible.

“The satellites hiss”

In principle the Concept E is a very low-noise system. In the high range area, the very high-resolution quality speaker systems can expose the defective quality of a signal source (e.g. from mp3 files or analogue cassette recordings) that can hardly be heard on less high-quality boxes.

You can check the basic noise level by connecting an output signal (via a cinch cable) from an external source that is guaranteed to be good quality – such as a music CD on a portable CD player – to the front L/R input on the subwoofer. If all of the satellites are now playing noise-free, then they were not getting the correct signal before. Either the cinch cable is defective (try swapping them) or the output of your source appliance is not producing a sufficient signal.

However, if you continue to hear increased noise on this channel there is possibly a fault in the Concept E. Please check which satellite is affected by swapping the satellites over and finding out whether it is the satellite or the subwoofer electronics that are generating the excessive noise. If the fault “moves” with the satellite, the satellite is affected. On the other hand, if the noise remains on the same channel, the subwoofer amplifier electronics are responsible.

“The set loses its settings when I switch it off completely”

This is normal. The mains switch and the mains plug disconnect the subwoofer from the electricity supply and mean that the settings are lost. We therefore recommend using standby mode on a separate supply – this will ensure all of your settings are kept.

We also think that it's a good idea to make all of the interrelated settings of the individual channels (= all except master volume and, if necessary, subwoofers) on the AV receiver, DVD player or PC sound card driver software, not on the Concept E.

“When I switch the PC on or off I can hear a loud snapping or crackling.”

The speaker system reproduces any kind of acoustic signal that it receives from the signal source. It cannot differentiate between useful and disruptive signals. When the PC's sound card transfers the on/off impulses to the box set, the speakers will reproduce it. These will not usually damage your speakers. Nevertheless, we recommend minimising the volume using the PC's software before switching off, in order to limit these strong impulses.

Basic function test:

You can check the function of the subwoofer and the satellites by only connecting the (stereo) signal from an external source that is guaranteed to be good quality – such as a music CD played on a (portable) CD player – via a cinch cable (and possibly a Y adaptor) with the front input L/R on the subwoofer. The other four inputs on the subwoofer do not need to be occupied (= cinch cable disconnected). With this connection plug arrangement of front in L/R, the Concept E Magnum amplifier activates all satellites and the subwoofer through internal distribution. If the subwoofer and all five satellites now play correctly via a directly connected CD player, the Concept E Magnum was not receiving the correct signal before. Either the cinch cable is defective (try exchanging it) or the output of your source appliance is not producing the correct signal.

If you continue to experience unwanted noise/individual malfunctions, there is possibly a defect in the Teufel system.

Care instructions & cleaning:

To make sure you are able to enjoy your product from Lautsprecher Teufel for a long time, please note the following tips:

Do not expose the casing to direct sunlight.

Avoid extreme temperature differences and protect your speakers from moisture.

When cleaning the speaker, only use a slightly damp or dry cloth. Abrasive cleaners and products that contain alcohol should be avoided. Remove dust from the membrane very carefully with a dry cloth.

Original packaging

We recommend that you keep the packaging if you want to use the eight-week right of return because we can accept the loudspeakers only IN THEIR ORIGINAL PACKAGING. Empty boxes are not available.

Technical data

Technical data can be found in the product description on our web site at: www.teufel.eu

Contact

Please contact our service department if you have any questions, suggestions or if there is anything you think we could do better.

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Warranty terms

12 year warranty for speakers and 2 year warranty for power amplifiers and electronics (from purchase date) on materials and work time, with the exception of damage caused by incorrect use or electrical or mechanical overload. An original copy of our invoice is required as the warranty document. This warranty is exclusively valid for speakers, power amplifiers and electronics that have been purchased from Teufel for private use by end customers. The warranty is not valid for speakers, power amplifiers and electronics that the end user has purchased from a different distributor. The warranty conditions of the respective manufacturers are valid for third party products. If the Teufel product is sold on privately, the warranty may be transferred to the purchaser, providing that the original proof of purchase is also transferred.

Returns

Teufel guarantees an eight-week right of exchange or return with rebate of the purchase price paid. The return of individual components from a set is only possible if these components are also offered for sale separately by Lautsprecher Teufel. If one or more components are returned, any price discount given by Lautsprecher Teufel on all components in a set as part of the price for the set is waived. For the components returned, customers shall therefore be refunded only the difference between the set price and the purchase price of the individual components that they retain. The financial outcome for customers is as if they had bought the remaining components at the individual price from the outset.

You can find more information on the subject of returns on the returns form that accompanies the delivery or online in the support area of our website www.teufel.eu.

If you need to return an item, do not act without the prior agreement of Lautsprecher Teufel.

We can only process and accept returns if you have informed us first by phone and discussed the procedure with us!

Active subwoofer

Speaker for bass playback, with integrated amplifier. Very low frequencies can be only reproduced by a large-scale speaker. In order for the main speakers to stay as compact as possible, a separate subwoofer is used for bass tones. It can be located unobtrusively in the living room: for instance, behind the sofa or under a side table. The cut-off frequency between the main speakers and the subwoofer depends on the components used, but is usually between 50 and 120 hertz.

Auto on/off function

The Auto on/off function switches the subwoofer on as soon as a signal is detected and off again a certain time after the last signal was transferred (around 20 minutes).

Centre

Central speaker in the home cinema system. All dialogues are played back via the centre. Therefore, good voice playback capability is essential for the centre.

Direct emitters

Direct emitters are all conventional speaker boxes that have been set up so that they emit sound towards the listener in a straight line. In a home cinema, direct emitters are mainly used for the three front channels, in concert sets and in the rear area.

Dolby Digital/DTS decoder

Electronic switch for splitting the digital signal from the DVD into up to 7 individual analogue signals. Dolby Digital and DTS are two different sound formats, so two different decoders are also required. AV receivers, DVD players or corresponding sound cards usually have both decoders.

Frequency/cut-off frequency

You can use the cut-off frequency to determine the frequency level at which playback stops coming from the subwoofer and starts coming from the satellites. If, for example, you set a cut-off frequency of 120 Hz, all frequencies above 120 Hz are emitted by the satellites, frequencies under 120 Hz are played by the subwoofer.

Level

The level controller on the subwoofer is used to adjust the volume. For perfect playback, all speaker channels – incl. the subwoofer – should be set such that the signals from the individual speakers can be heard equally loudly at the listening location.

Phase

With the phase controller, you can adjust the subwoofer to the satellites such that the speaker membranes vibrate in the same direction in the cut-off frequency range. If the phase is set incorrectly, the bass may be weakened or cancelled. If the subwoofer is located between the front speakers we recommend 0°; for a position close to the listening location 180°. If the subwoofer is in another location, the “180°” setting can balance out the reduced bass playback. Set the phase controller appropriately to get the strongest bass playback.

Sub out

Output on the receiver/amplifier to connect an active subwoofer using a mono-cinch cable.

Surround speaker

Effects and atmospheric sounds are reproduced through the surround speakers. This gives a greater spatial feel when playing back films and music.

5.1/7.1 pre out

Pre-amplifier output on the receiver or output on the DVD player. One analogue signal is provided for each speaker channel via cinch connection.

6.1/7.1 technology

Surround sound process with one or two rear centre speakers between the lateral rear effect speakers. The additional rear centre signal (compared with 5.1 systems) is created from the stereo rear effects signals (e.g. THX® Surround EX, Dolby Digital EX) or comes from a separate dedicated channel (DTS Discrete). Although only one channel has been added, you have the option of connecting one (6.1 technology) or two (7.1 technology) rear centres. That is why we talk about 7.1-channel sound, even though the sound format is 6.1-channel.



Please contact our service department if you have any questions, suggestions or if there is anything you think we could do better.

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