

## Motiv 5

PC/multimedia/home cinema system  
with integrated 5.1 amplifier and remote control

**Teufel**

### **For your information**

The information in this document may be changed without advance notification and does not represent any obligation on the part of Lautsprecher Teufel GmbH.

No part of these operating instructions may be copied in any way, whether electronically, mechanically, using photocopies or recordings, or transferred without the prior written agreement of Lautsprecher Teufel GmbH.

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Version 1.2  
September 2008

### **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.

### **Trademark**

© All trademarks are the property of their respective owners.

### **Technical data**

Technical data can be found on our homepage at: [www.teufel.eu](http://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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[www.teufel.eu](http://www.teufel.eu)

### **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. 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 provides an eight-week right of exchange or return with reimbursement of the full 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](http://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!**

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## Safety information

**Please read the following safety information carefully.**

*Risk of suffocation – keep packaging materials (e.g. the plastic film) 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 are 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 though you have followed the operating instructions
- ▶ 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.

**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 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.

**Information on location:** Do not use the appliance unsecured 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 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 on the relevant 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, as they could come into contact with parts carrying high voltages, which could then cause short circuits and fires. Therefore do not spill any liquids of any kind on the appliance. Frequently asked questions: 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 to our service department.

**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:** Loud noises can damage hearing. Sudden high 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. At high volumes, always keep a certain distance from the appliance and never have your ears right next to the speaker.

## Motiv 5, introduction

**Dear Lautsprecher Teufel customer,**  
thank you for purchasing this Motiv 5 system.

With this speaker set from Teufel, you have chosen an elegant and powerful multimedia home entertainment system that, despite its compact dimensions, delivers excellent sound quality.

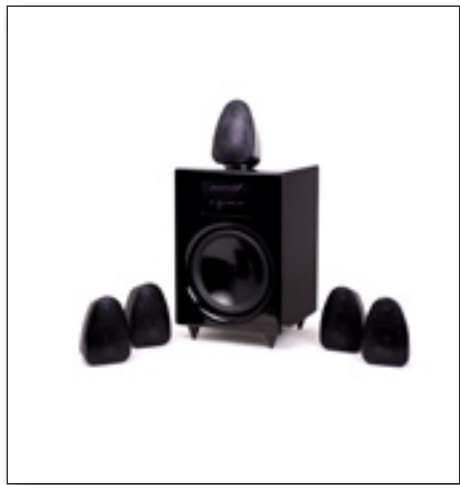
This set can be operated either with a multichannel AV receiver/amplifier (partially active) or independently, without an additional amplifier (fully active) through a PC or DVD player with decoder. Stereo sources, such as MP3 players, satellite receivers, TV sets, games consoles, CD players or DJ mixers, can also be used very successfully with the Motiv 5.

The Motiv 5 subwoofer features six integrated power amplifiers. One for the integrated 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.

The set comes equipped with all of the individual parts required for surround reproduction. You only have to provide the source of the signal, for example via a DVD player with analogue 5.1 outputs. A selection of suitable DVD players can be found on our website [www.teufel.eu](http://www.teufel.eu) in the "FAQ/support" area.

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 you need for correctly setting up and operating your Motiv 5 multimedia 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.



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  
.....

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

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" section on pages 19 to 22 carefully. You can find answers here to the most frequently asked questions.

# Teufel

## Unpacking • Contents • Attachments

**First please check that the system is complete.**

**Please note**  
Please keep the boxes for at least the eight-week return period, as we can ONLY repay the full purchase price if the products are returned in the ORIGINAL PACKAGING in which they were supplied.

### Unpacking

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

We recommend retaining the boxes in order to ensure safe transport for any later servicing.

The Motiv 5 is supplied as a complete system.

### Contents

- ▶ 1 x Motiv 5 subwoofer A 500/6 SW with integrated 5.1 amplifier
- ▶ 5 x identical Motiv 5 satellite speakers MO 5 FCR
- ▶ 1 x Motiv 5 remote control A 500 RC incl. batteries
- ▶ 5 x U-shaped profiles for attaching the satellites to the wall brackets/bases
- ▶ Screws, for mounting speakers
- ▶ 20 rubber feet for the satellites
- ▶ 1 x IEC cable for AC power supply



◀ **Subwoofer  
A 500/6 SW**



◀ **5 x satellite  
speakers  
MO 5 FCR**



◀ **Motiv 5  
remote control  
A 500 RC**



◀ **U-shaped profile**



◀ **IEC cable**

**\*All optional accessories can easily be ordered as required, e.g. from the accessories area on our website: [www.teufel.eu](http://www.teufel.eu)**

### Accessories \*

Due to varying customer requirements, the Motiv 5 is supplied without any accessories. Suitable optional accessories for the system are shown on the next page.

First please check that the system is complete.

## Attachments (optional)

### Teufel speaker cable, 2 x 2.5 mm<sup>2</sup>



Highly flexible copper wire (650 strands) with transparent cover and markings for the correct polarity. Due to a high number of customer requests, our cable is pre-cut to practical lengths. We recommend this cable especially if you are operating the Motiv 5 on an AV receiver and/or if cables over six metres long are required to bridge the gaps to the speakers.

### Teufel voltage reducer



Specially developed cable adapter from Teufel. Allows the Motiv 5 to be connected to amplifiers/receivers that do not have specific subwoofer outputs (Sub out) in cinch format, 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.

### Teufel mono cinch cable



Specially developed subwoofer cinch cable – the best way to connect our active subwoofer to your receiver or amplifier. Protected by screening 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.

### Teufel Y adapter cable



For connections from your PC/portable CD player/MP3 player to the Motiv 5 amplifier. The 3.5mm mini-jack makes it easy to connect your sound card. You need this adapter for fully active operation on a PC in stereo or surround three mode.

### Base Teufel Concept M 50 P



Slimline, height-adjustable base for the Motiv 5 satellites. The speaker cable can be hidden inside the base.

Height: 80–120 cm.

Design: Metall, black

### Microlock wall bracket



The new Microlock has proven itself to be an ideally suited wall mounting for the Motiv 5 satellites. The two brackets allow unobtrusive and secure mounting on ceilings, sloping ceilings or walls.

### Shortlock wall bracket



This bracket makes it easy to mount the satellites using the thread in the speakers. The bracket allows free horizontal and vertical positioning. Now available in black and silver.

### Cable set M0 500 W



Complete cable set for the Motiv 5 for connection to computer sound cards, notebooks, DVD players or the Teufel decoderstation 3. The specially coordinated set consists of: A 30-metre 1.5 mm speaker cable, three 3-metre stereo cinch cables and three Y adapters (2 x cinch > 3.5mm stereo).

You can order the accessories shown here from Teufel online at:

[www.teufel.eu](http://www.teufel.eu)

## Set-up: PC system

### General information on configuration

Because of its compact size and elegant design, it's easy to integrate the Motiv 5 harmoniously into your home. For a surround set, however, there are some set-up criteria you need to observe, in order to get the best sound from your Teufel speakers.

The recommended set-up on the following pages represents the best possible arrangement for perfect multichannel playback at 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 Motiv 5 as a PC system

When using the Motiv 5 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.

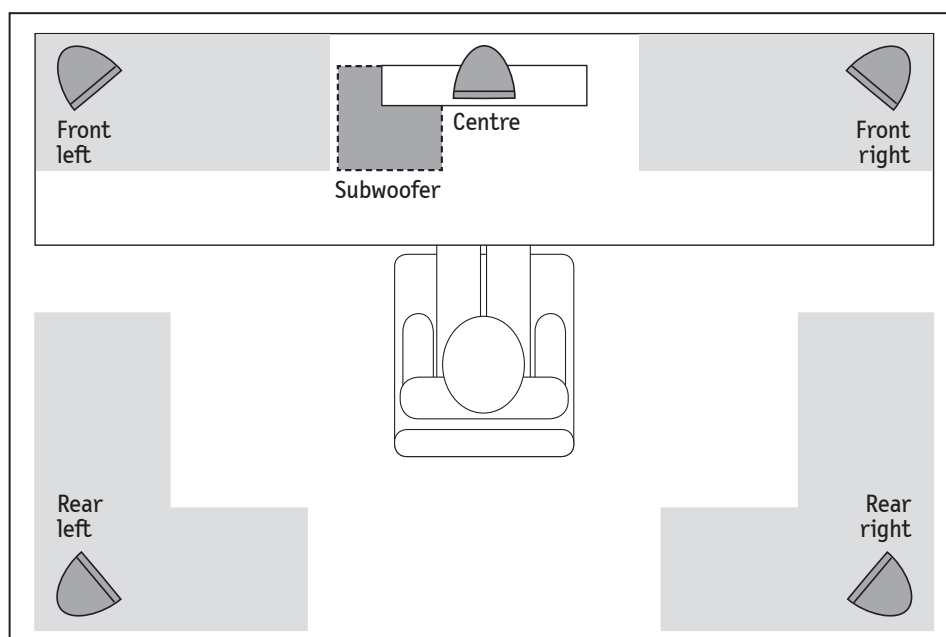
Because the centre reproduces actors' dialogue, this speaker must be positioned as centrally as possible under/over/next to/on top of the monitor and inclined or angled towards the listener. The front speaker is attached next to the monitor at the same distance from it or the reception area left and 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 usually ideal. The rear speakers should be behind or next to the listening position – ideally at the same height or higher (max. 2.10 metres). We do not recommend placing them lower.

#### Example set-up of a Motiv 5 being used 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.*

*Place the front and rear speakers in the grey area.*





## Set-up: Home cinema system

### Setting up the Motiv 5 as a home cinema system

When using the Motiv 5 as a home cinema system, we recommend 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.

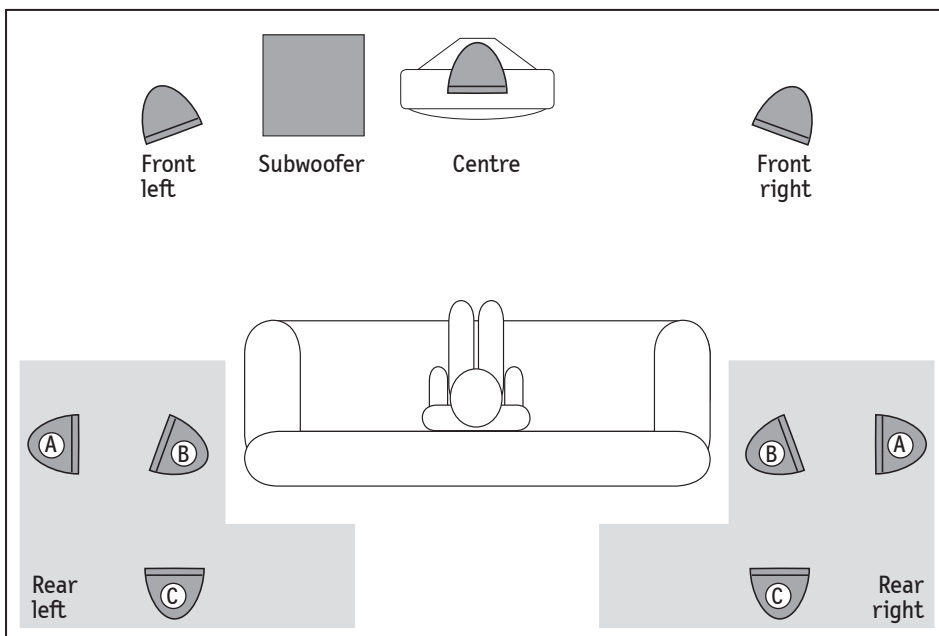
Because the centre reproduces actors' dialogue, this speaker must be positioned as centrally as possible under or over the TV and inclined or angled towards the listener. For this purpose, consider using the optional table stand. Using the old stereo tradition (distance to listener = distance between 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 Concept M 50 P bases are ideal for this purpose, as are the Microlock wall brackets. Using the base automatically guarantees optimum playback height for satellite boxes. The Shortlock brackets allow horizontal and 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 usually ideal.

The two rear speakers should be set up to the left and right either to the side or behind the listening position – ideally at a height of no more than 2.10 metres, e.g. on a shelf or directly on the wall using the Microlock wall bracket. The speakers can be set-up at the same height as the front speakers using the M 50 P bases; but we advise you not to locate them lower.

The optimum positioning is left and right from the listener (A) at around 20 degrees from the parallel. We always recommend that the distance between the rear speakers and the listening location is more than 1.00 m. But if you (have to) sit closer, please ensure that the front of the speaker is not pointing directly at you but rather angle the speakers more towards the wall (B). Or create a greater distance by positioning the speakers higher than 1.20m (this can also be on the ceiling) or further away (C).




**Example set-up of a Motiv 5 being used as a home cinema system.**

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

*Please position the rear speakers within the grey area.*

## Connection: Satellites

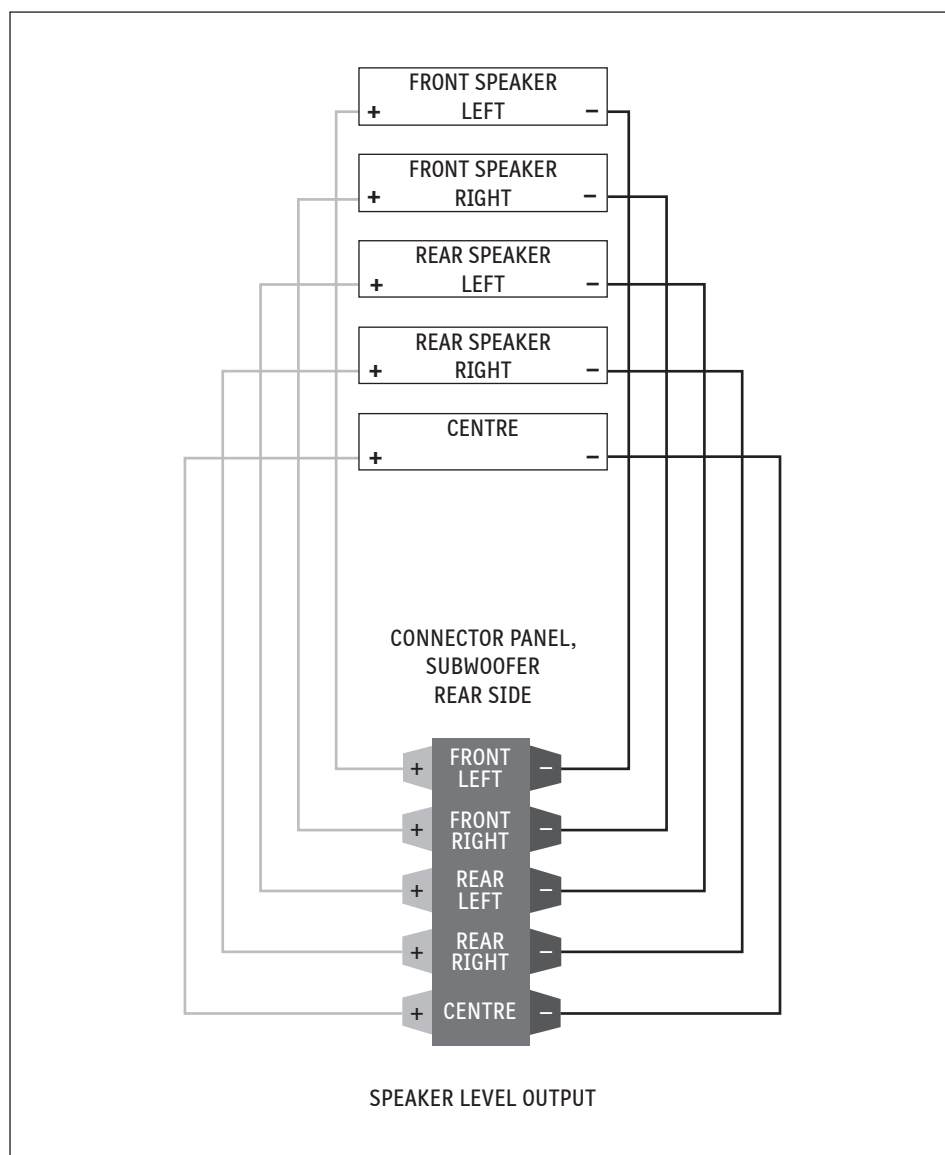
### Connecting the satellites



To do this, cut the cable to the required lengths. Strip the plastic coating from the ends of the speaker cables (as shown). The speakers and amplifier have corresponding [+] and [-] terminals. 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.

Connect the speakers to the correspondingly marked clamp connections on the rear of the subwoofer; i.e. the front left speaker to FL and the rear left speaker to RL and so on.



## Connection: 5.1 sound card

### Connection to a 5.1 sound card

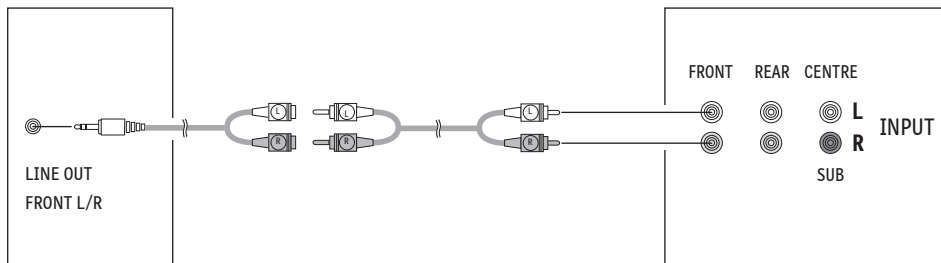
The Motiv 5 is perfect for direct connection to any computer. If your sound card is set up for 5.1 operation, you will usually find three 3.5 mm mini-jack outputs. Connect the card, using three adapters (3.5 mm stereo mini-jacks to 2 x cinch), to the inputs for the front R/L, rear R/L, centre and subwoofer on the reverse of the Motiv 5. 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.

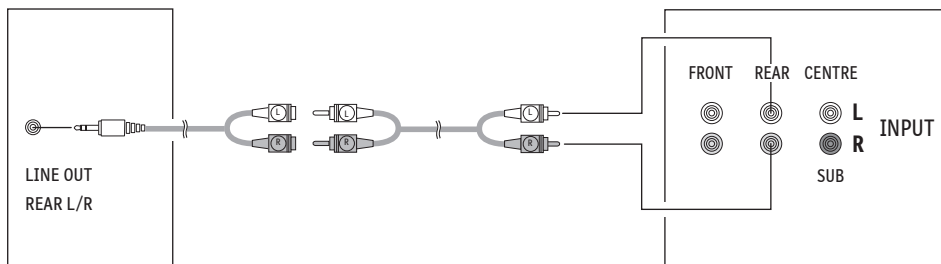
*Example sound card settings are described in detail on page 15.*

### 5.1 SOUND CARD

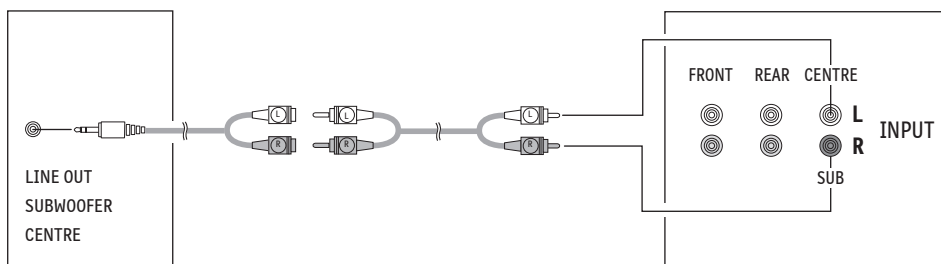
### SUBWOOFER MOTIV 5



*Example connection of a 5.1 sound card*



**Information**  
If you are using a 7.1 sound card, the outputs for the centre channels are not used.



## Connection: DVD player/recorder

A selection of suitable DVD players can be found on our website [www.teufel.eu](http://www.teufel.eu) in the "FAQ/support" area.

### Connecting the Motiv 5 to a DVD player/recorder

The Motiv 5 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!

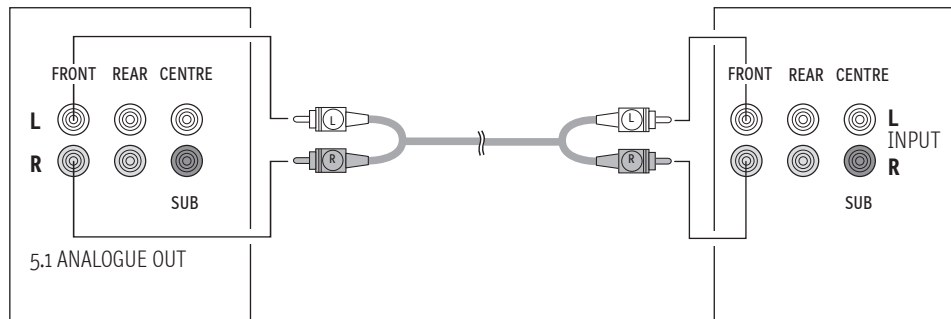
To control the Motiv 5 directly via a DVD player, the player/recorder must have an integrated Dolby Digital/DTS decoder. This type of equip-

ment 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.

#### DVD PLAYER/RECORDER

#### SUBWOOFER MOTIV 5

DVD player settings are described in detail on page 16.

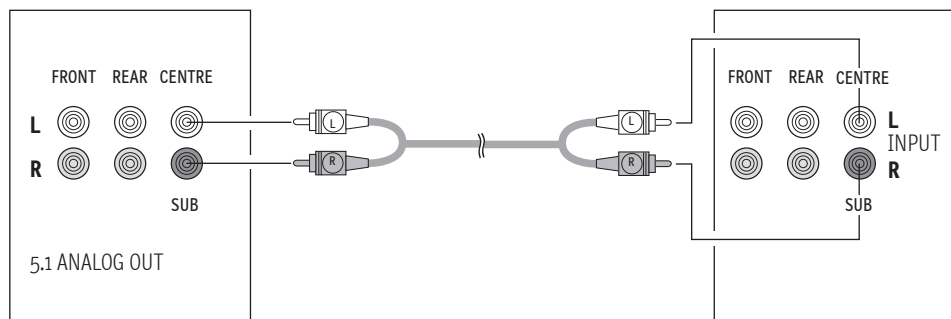
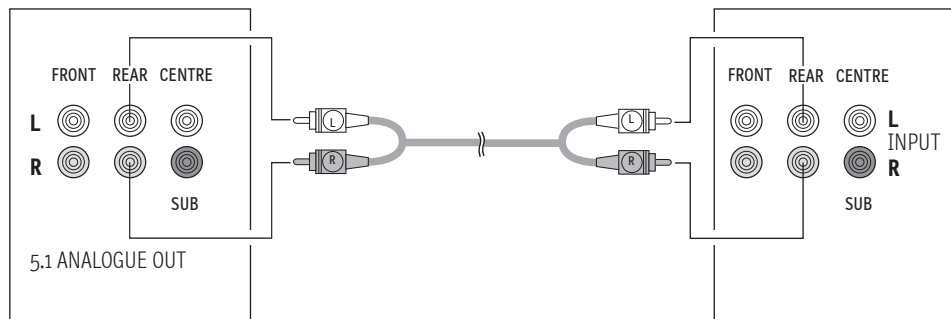


### Connecting the Motiv 5 to a DVD player/recorder with no 5.1 analogue outputs

Even if your DVD player/recorder does not have a decoder or six analogue cinch outputs, you can still successfully use the Motiv 5.

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 Motiv 5, the four 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.



## Connection: Stereo sources

### Connecting the Motiv 5 to stereo sources

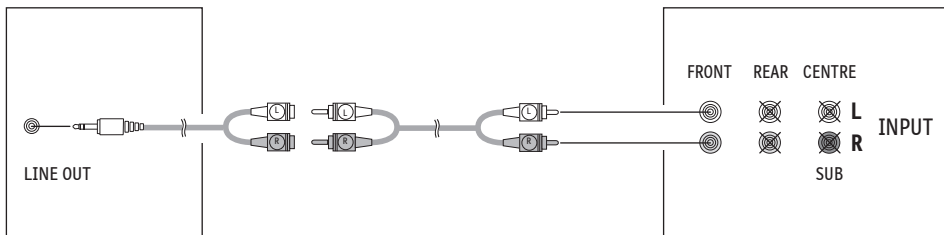
Stereo soundcard, notebook, MP3 player, satellite receiver, TV set, games console, CD player, DJ mixer, Discman, Walkman, etc ...

You can see here how universally the Motiv 5 can be used. The set 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 six of the Motiv 5's speakers. This admittedly doesn't sound as perfect as Dolby Digital, but does sound better than pure stereo reproduction.

Here's how it works:

Connect the stereo output of your appliance to the front left/right inputs on the rear connector panel of the subwoofer. It is possible to use a 3.5mm mini-jack to 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.

**NOTEBOOK  
MP3 PLAYER  
DISCMAN  
WALKMAN  
STEREO SOUND CARD**



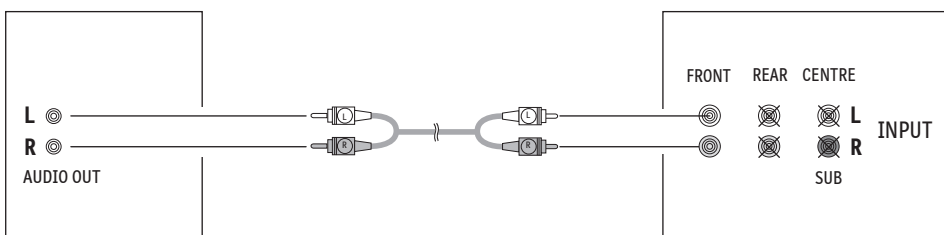
### Notebook/laptop

For 5.1 reproduction you usually need an 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 has three analogue mini-jack outputs, please proceed as described in the section "Connecting to a 5.1 sound card".

### Please note

No other plugs should be in the other sockets on the Motiv 5-Subwoofers (in Centre, Subwoofer, Rear R/L)!

**SAT RECEIVER  
TV  
GAMES CONSOLE  
CD PLAYER  
DJ MIXER**



### Please note

No other plugs should be in the other sockets on the Motiv 5-Subwoofers (in Centre, Subwoofer, Rear R/L)!

## Connection: AV receiver

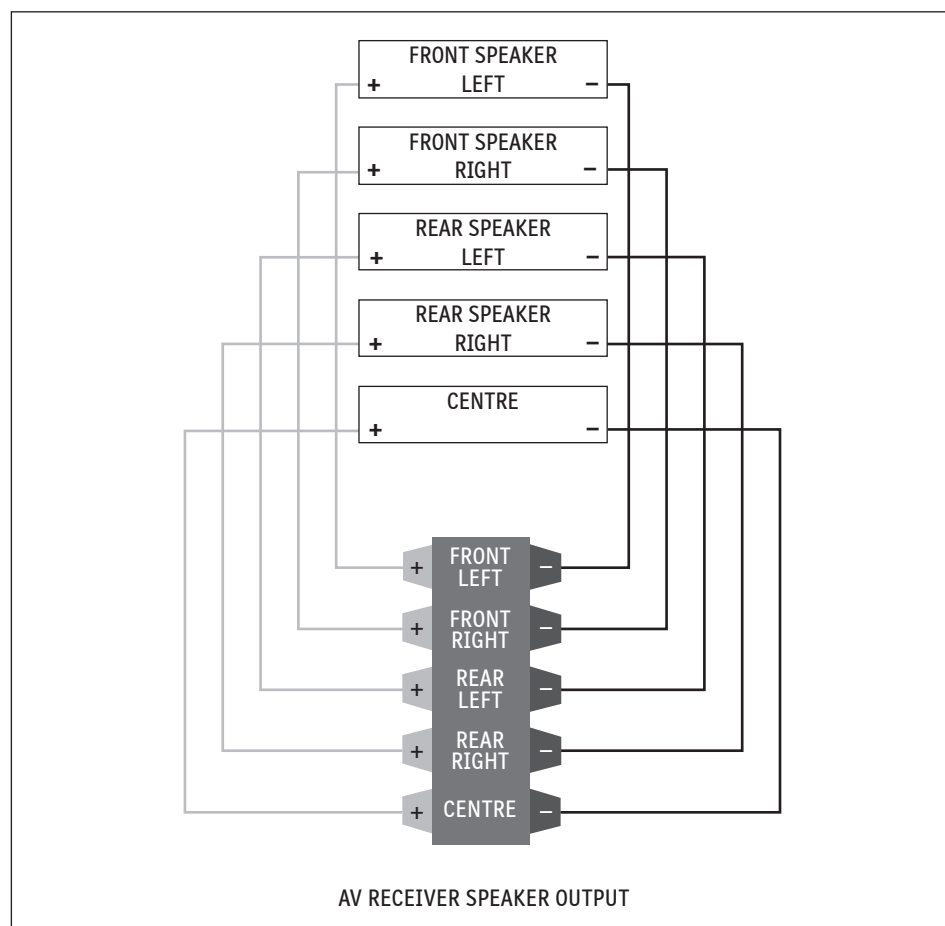
### Connecting the Motiv 5 to a AV receiver

The numerous possibilities for using the Motiv 5 even include connection to an AV receiver. Although designed to be fully active, the set is partially active in cooperation with an AV receiver. You can connect the Motiv 5 like a standard speaker system: the five satellites via 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 on the

A/V receiver/amplifier.

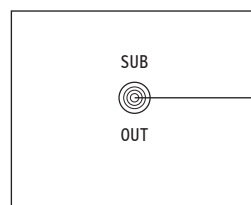
If the AV receiver/amplifier has preamplifier outputs for all channels (front R/L, rear R/L, centre and subwoofer), the Motiv 5 can also be connected via three cinch cable pairs to the subwoofer and the satellites via speaker cables to the subwoofer. However, we recommend using the first version.

*AV receiver settings are described in detail on page 16.*

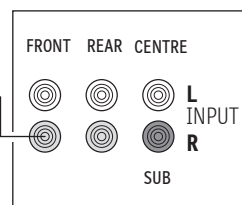


**Information**  
In order to guarantee that the automatic on function (auto on) works correctly, the front cinch input (front right) has to be used. The auto on/standby switch only reacts when the front R input is being used. The subwoofer also receives the full subwoofer signal via this channel! The subwoofer input can remain unoccupied.

### AV RECEIVER



### SUBWOOFER MOTIV 5

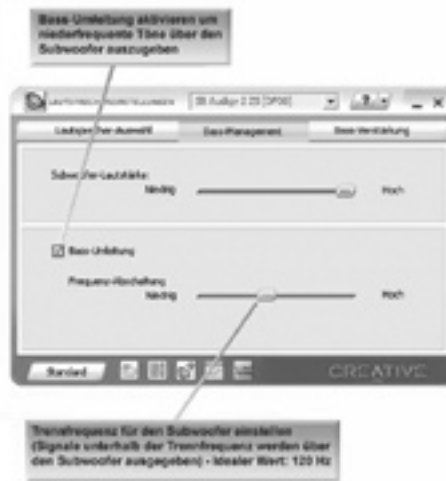


## Set-up: 5.1 sound card

### Sound card settings

The Motiv 5 itself has no built-in decoder function. Therefore it is “dependent” on the allocation of the external decoders when splitting the signals. This decoder is a component of the sound

card software. Set the correct allocation so that all satellites and the subwoofer are included and therefore also controlled.



The following illustrations clarify the steps for configuring a sound card (here, using a Soundblaster Audigy 2 ZS) with the Motiv 5.

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 the bass management set-up. The transfer frequency can be set using the sliding control (described here as frequency/head shut-off). Select the optimum setting of 120Hz.



**Tip**  
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® set-up 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.

### Adjustment to the DVD player with 5.1 analogue output

The Motiv 5 itself has no built-in decoder function. Therefore it is “dependent” on the allocation of the external decoders when splitting 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:

- ▶ The 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”** (not “large”!).
- ▶ Set the subwoofer to **“on”** or **“yes”** in the speaker set-up menu.
- ▶ The optimal cut-off frequency is 120Hz. 100Hz or 150Hz are also possible.
- ▶ Set the slider control on the subwoofer itself to **“Bypass”**.



### Adjustment to the AV receiver

During operation on the AV receiver, the Motiv 5 is dependent on the AV receiver being set-up correctly. Only when the receiver’s decoder assigns the signals optimally will all of the boxes of the Teufel speaker set be activated, as the Motiv 5 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.



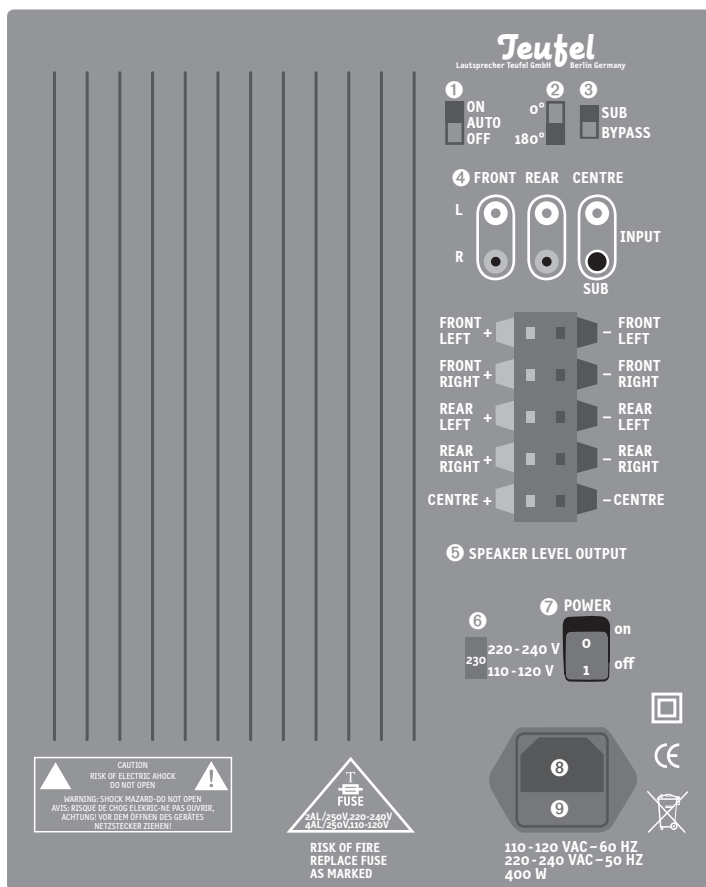
#### The following basic settings should always be made:

- ▶ 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”** or (not “large”!).
- ▶ Set the subwoofer to **“on”** or **“yes”** on the speaker set-up menu.
- ▶ The optimal cut-off frequency is 120Hz. 100Hz or 150Hz are also possible.
- ▶ Set the slider control on the subwoofer itself to **“Bypass”**.





## Operating elements on the subwoofer



### 1 Operating mode

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.

### 2 0–180° Celsius – phase switch

The phase switch 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.

### 3 Sub – bypass

If you operate your Motiv 5 on a device that allows you to set the cut-off frequency (“Crossover”), choose the position “Bypass”. If there is no option to externally influence the cut-off frequency (e.g. in devices that only offer a stereo signal) select “Sub”.

### 4 Input

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

### 5 Speaker level output

Clamp the speaker cable from the five satellites here.

### 6 Voltage selection switch

Allows you to adjust for regional voltage differences. The switch is preset to the standard European voltage of 220–240 V. Under no circumstances should the switch be moved to the 110–120 V position during operation at 220–240 V.

### 7 Power

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

### 8 IEC socket

The power cable is connected here.

### 9 Fuse

You can change the fuse here.

## 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 89/336 EEC and 72/23 EEC



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.

### Please note

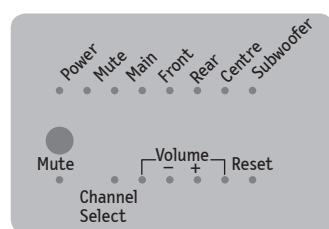
If you are going to be away for a long period of time or if the 5.1 amplifier is not being used, switch the mains switch ⑦ to "off". Please note that the volume settings saved on the appliance will be deleted by disconnecting the mains plug or switching off the mains switch ⑦.

### Start-up

Switch on the 5.1 amplifier by setting the mains switch on the rear ⑦ to "On" and set the operation mode switch ("Off/Auto/On") ① to "Automatic" mode (middle position). 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 switches on automatically when it receives an audio signal. If the signal stops, it will automatically return to standby mode after around twenty minutes. When the operation mode switch ① is set to "On", the 5.1 amplifier will stay on continually (regardless of whether a programme is running or not).

### Settings on the display

It is also possible to make all equalisation settings on the subwoofer of the Motiv 5 using the remote control. The display for the settings is located on the front of the subwoofer.



The "Mute" button 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 Selection" button scrolls through each of the available control areas of the subwoofer.

Use the [+] and [-] keys in the "Volume" area to set each required level. During increases or decreases, the adjoining LEDs flash red. Once the maximum or minimum level has been reached, the LED lights up constantly.

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.

Press the "Reset" button to reset the system to its original factory settings.

### What is shown in the subwoofer display:

Once the subwoofer has been switched on using the rear main power switch, the LED under "Power" lights up green. Even when the system is in Standby mode, the LED under the word "Power" lights up green. While the subwoofer is being operated the "Power" LED turns dark. In this case, the LED under the word "Main" lights up red. The system is now ready for operation.

Mute = all sounds switched off

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

Main	=	Total volume
Front	=	Volume of the front speakers
Rear	=	Volume of the rear speakers
Centre	=	Volume of the centre speakers
Sub	=	Volume of the subwoofer

The red LED marks the control area chosen each time.

With the exception of Reset, all of the above-described functions can be called up using the remote control.



## Frequently asked questions

### “The subwoofer is buzzing”

The Motiv 5 has a powerful transformer and a generously proportioned power pack that delivers high-output performance. 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. During operation this minimal buzzing will disappear as 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:

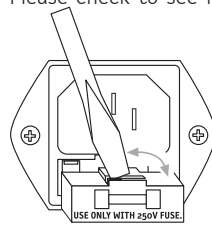
1. The subwoofer is connected to a different power circuit from the rest of the equipment. Ensure that all linked appliances (including the PC if connected) are connected to a single power circuit or plug.
2. The aerial connected to the equipment or TV has a different ground potential to the socket. 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 plug 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.

### “There is no sound – neither from the satellites nor from the subwoofer”

Please check to see if the LEDs on the front of the subwoofer display are illuminated; if not, change the fuse, as it is possible that the fuse in the subwoofer has burnt out – possibly as a result of a power surge. The Motiv 5's fuse compartment is located underneath the



IEC power connector (see illustration of page 17, item ⑨). Use a small screwdriver to lever this out, exchange both of the fuses and then return the fuse switch to the fuse compartment. The subwoofer should now work - if it does not contact other devices.

### “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?

## Frequently asked questions

### **“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, set the subwoofer volume to “minimum” (LED lights up constantly), remove the subwoofer cinch cable from the PC/DVD player/AV receiver, increase the volume 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 off after playing high volumes for a long time (the satellites keep on playing).«**

It is possible that you have operated the Motiv 5 beyond its performance boundaries.

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 Motiv 5 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 Motiv 5.

However, a fault cannot be ruled out if the Motiv 5 switches off at lower volumes in rooms of 30m<sup>2</sup> 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.

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

The Motiv 5 is purely a playback system – it has no built-in decoder function. Therefore it is “dependent” on the allocation of the external decoders when splitting 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 Motiv 5 is “blameless” – it only plays back the signals it receives. 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.

## Frequently asked questions

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

The Motiv 5 is purely a playback system – it has no built-in decoder function. Therefore it is “dependent” on the allocation of the external decoders when splitting 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 Motiv 5 is “blameless” – it only plays back the signals it receives. 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 Motiv 5 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”**

Generally speaking, the Motiv 5 is a very low-noise system. In the high range area, very good-quality high-resolution speaker systems can expose the defective quality of a signal source (e.g. from mp3 files or analogue cassette recordings) that is hardly noticeable on less high-quality speakers.

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 Motiv 5. 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 consider it a good idea to make all of the interrelated settings for the individual channels (= all except master volume and, where applicable, subwoofers) on the AV receiver, DVD player or PC sound card driver software, not on the Motiv 5.

### “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). Using this connection set-up for front in L/R, the Motiv 5 amplifier activates all satellites and the subwoofer via internal distribution.

If the subwoofer and all five satellites now play the signal from a directly connected CD player properly, the Motiv 5 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.

### 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.

### Technical data

Technical data can be found on our homepage at: [www.teufel.eu](http://www.teufel.eu).

### Active subwoofer

Speaker for bass playback, with integrated amplifier. Very deep frequencies can only be played back with a large-volume speaker. To make sure that the front speakers can be kept 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 front 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.

### Cinema Set - 5.1

All Teufel speaker systems that are supplied with three direct front speakers and dipole effect speakers are also called a Cinema Set. In contrast, five direct speakers are called Concert Sets.

### Cinema Set 5.1

All Teufel speaker systems with five direct satellites are called Concert Sets. In contrast, Cinema Sets have three direct front speakers and a dipole rear speaker.

### Dipole

Dipole speakers emit sound in two directions. They are therefore ideal rear speakers for your home cinema because their emission characteristics imitate the speaker arrangement in a commercial cinema. Cinemas always use multiple speakers for the rear channels and their sound is distributed throughout the whole room. Dipoles have been designed to emit sound indirectly into the room (i.e. not locatable), which is different from direct emitters (see below).

### Direct emitters

Direct emitters are conventional speakers that transport sound to the listener in a direct line. In the home cinema, direct emitters are used generally to play back the three front channels; in Concert Sets they are also located to the rear.

### Dolby Digital/DTS Decoder

Electronic switching to divide up the digital multichannel signals from the DVD into as many as seven individual 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

This is where you stipulate the frequency used for playing back sounds from the satellites or subwoofer. 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.

### Rear speaker

Effects and atmospheric sounds are played back via the rear speakers (either → dipoles or → direct emitters). This gives a greater spatial feel when playing back films and music.

### Sub out

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

### 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 channel via cinch connection.

### 6.1/7.1 technology

Surround sound procedure that, in addition to the left and right rear channel (and the relevant speakers), also uses a centrally played back rear channel. Depending on the sound format, this “rear centre” is embedded in the stereo signals for the left and right rear channel (“matrixed”) and extracted for playback (e.g. for THX® Surround EX, Dolby Digital EX) or transferred as an independent signal. Instead of the dominant 5.1 technology, these are therefore 6.1 sound formats. In practice, it has proven to be beneficial for the sound to allow the rear centre to be played back by two centrally located rear speakers. AV technology equipped with the necessary amplifiers and connections is therefore called “7.1” although it only plays back a 6.1 signal.

# Teufel

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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