



Motiv 6

5.1 Home Theatre Set with Active Subwoofer

Teufel

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Trademarks

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Original packaging

We recommend that you hold on to the packaging of all your new Teufel products, as we only accept loudspeakers back within the initial eight-week return period if they are shipped in their ORIGINAL PACKAGING. We do not provide packaging boxes separately.

Technical specifications

For technical specifications of the products described herein, please refer to www.teufel.eu.

Contact

If you have any questions, suggestions or criticisms, please contact our support team:

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Terms of warranty

Lautsprecher Teufel GmbH provides a twelve-year warranty for loudspeakers and a two-year warranty for amplifiers and electrical components, starting at the purchase date. The warranty covers all materials and time needed. The warranty does not cover devices damaged as a result of improper use or electrical/mechanical overloading. The original Teufel invoice is your proof of warranty. This warranty applies exclusively to loudspeakers, amplifiers and electronic components purchased by consumers from Teufel for private usage. The warranty does not apply to loudspeakers, amplifiers and electronic components sold to consumers through third-party dealers. For third-party products supplied together with the Teufel system, the terms of warranty of the manufacturer in question apply. When Teufel products are resold privately, the warranty may be transferred to the new owner. For this, the new owner requires the original Teufel invoice.

Returns policy

Teufel provides an eight-week right of return with a money-back guarantee.

You may only return individual components from a set if Teufel offers these components for sale separately. If you return one or more individual components from a set, this voids the discount that Teufel provides on the sale of components as a set. This means that for individually returned components from a set, you will be refunded the difference between the set price and the sum purchase price of the individual components you decide to keep, i.e., we will deduct the discount that applies to set purchases.

For further information on returns, please refer to the returns form provided with your shipment (or online at www.teufel.eu in the support section).

If you decide to return any or all of the purchased goods, please always contact us first.

Note that we can only process and accept returned goods if you have telephoned us in advance and discussed the required returns procedure.

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Safety guidelines

Please read the following safety guidelines very carefully.

Packaging materials, particularly plastic bags and foils, should be kept out of childrens' reach, as these can be dangerous (e.g., risk of suffocation). Never leave your children alone with electrical devices, as there is potentially always a risk of electrical shock.

In case of an emergency:

Immediately disconnect the unit's power plug from the mains socket. In the following cases, please contact one of our service technicians:

- ▶ Power plug or cable is damaged
- ▶ Liquid or other foreign substances have entered the interior of the unit
- ▶ The unit has been directly exposed to rain or another type of liquid
- ▶ The unit is inoperational even though you have followed all the operating instructions
- ▶ The unit has been dropped or otherwise damaged

Lautsprecher Teufel is not liable for any incidents resulting from disregard for the safety guidelines.

General note: Make sure to read this operating manual carefully and in its entirety. Before plugging in the units for the first time, make sure you have complied with all relevant safety and operating instructions. Keep this operating manual in a safe place so you can refer to it at a later date if necessary.

Always: If in doubt, consult the operating manual. Make sure to comply with all instructions regarding the units' setup and ongoing operation.

Cleaning: Avoid cleaning the units with domestic cleaning agents, as these may scratch the surface. Just use a dry cloth. Before cleaning a unit, always unplug the power cable.

Humidity and sunlight: Never operate the unit in humid or wet spaces, e.g., near a bath tub, shower, wash basin, drain, in a damp basement, or near a swimming pool. Never expose the loudspeaker to humidity, and avoid exposing it to direct sources of sunlight.

Placement: Never mount the units loosely in a vehicle, on an unstable surface, on a loose stand, on unsuitable furniture, or with insufficient bracing. The loudspeakers could topple and cause personal injuries, which you will be liable for. Especially when speaker cabinets are mounted on stands or placed on top of TV sets/monitors, they may topple due to external stress (cable being pulled, tripping over cable, accidental physical contact) – even if they seem to be mounted quite securely. As a result of their weight, toppling speaker cabinets can cause considerable damage, as well as becoming badly damaged themselves. The same applies to undersized or unprofessionally installed wall-mounting brackets, particularly on light walls. Always use adequately sized wall brackets for mounting loudspeakers, and ensure that the wall can withstand the stress. Never mount the units near a heat source. This could be a heater or oven, but also any other electrical device that heats up during operation (e.g., amplifier). Similarly, never place a heat source on top of the loudspeakers, such as a fan heater or candles. The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Ventilation: There are several ventilation slits and openings in the unit's housing. These are designed to ensure reliable operation and protect the unit from overheating. Never block or cover the ventilation slits; do not place the unit on a soft surface such as a bed, couch, carpet, etc., as this blocks the ventilation slits in the bottom of the housing. Do not put any newspapers, tablecloths, etc., on top of the unit. Most importantly, do not cover up the heatsink of the amplifier section or expose it to direct sunlight. Conversely, you should generally not attempt to provide additional cooling to the unit yourself. This is not necessary.

Power source: Make sure to connect the subwoofer to a power source that provides the correct voltage, i.e., the voltage indicated on the type plate. If you are unsure about the voltage provided by your domestic power connection, please contact us or your local electricity provider for advice. The unit does not require earthing. When connecting to the mains power socket, always use the supplied two-pole power cable. Under no circumstances should you modify the power cable, as it must comply with the official polarity and earthing regulations. Make sure to plug the power cable only into a double-pole socket.

Cables: Lay all the cables flush with the floor and walls. Avoid any loops in your cables that could cause people to trip up. Cable loops can also cause electrical interference and degrade the sound quality. Make sure to lay your power cables out of reach so that they are not stood on or squashed by heavy objects. If you notice any cable damage, replace the cable. Pay special attention to all plug connectors, the mains socket, and the subwoofer's connector panel. Regularly check all powered cables to and from the loudspeakers for insulation issues and breakage. If you detect a fault, immediately power down all connected units, unplug the cables and replace the defective cable.

Disuse: During prolonged periods of disuse (holidays, etc.), always unplug the subwoofer from the mains socket.

Thunderstorms: In the event of a thunderstorm, switch off and unplug the unit as soon as you can in order to avoid damage from lightning strikes.

Overloading: Never overload your wall sockets, extension cables and multiboxes, or the integrated power sockets on your electrical devices. Power overloads can cause short circuits and fires. Also avoid turning up the volume control excessively on your amplifier, particularly if you are also boosting the bass frequencies (bass control, loudness button, bass boost button, etc.).

Liquid and foreign substances: Liquids or other foreign substances should never get inside the unit, as they may interfere with exposed live parts and cause short circuits or fires. Absolutely avoid spilling any type of liquid onto the unit. In case of a fault, never attempt to repair the unit yourself. Always contact our support team first and discuss the fault with them. If appropriate, they may give you instructions on how to clear the fault. If this is not possible, send the unit directly to our service address.

Transport: Take utmost care when transporting the unit, and use a sack barrow if possible. Be aware that both the sack barrow and the unit can easily fall over as a result of sudden stopping or jolting (uneven ground, lurching movements, etc.).

Replacement parts: During the period of warranty, Lautsprecher Teufel will supply all required replacement parts. Your warranty will not be voided as long as you use Teufel spare parts to replace any defective components.

Unusual noises: If any unusual noises occur during operation, or if the sound gets distorted, immediately turn down the amplifier volume to a level where the sound returns to normal.

Replacing the fuse:

Unplug the power cable before replacing the fuse. Make sure that the replacement fuse has the same rating as the defective fuse.

Speaker volume: Excessive loudspeaker volume can cause irreversible hearing loss. The subwoofer may emit high sound pressure levels very unexpectedly when it is suddenly triggered into activity by a bass impulse ("Standby/Auto On" mode) – particularly if the unit is on full volume. As well as physical hearing loss, also watch out for psychological stress caused by excessive volume. Children and pets are particularly sensitive to noise. Always set the volume control of your audio system to a level that is appropriate to the surroundings. When the system is playing at high volume, do not stand too closely to the subwoofer and never put your ears directly up to any of the loudspeakers.

Introducing the Motiv 6 system

Dear Lautsprecher Teufel customer,

Thank you for purchasing a set of loudspeakers from Lautsprecher Teufel.

Our Motiv 6 system is designed for audio playback in rooms sized up to 30 m². For loudspeaker purposes, the room size extends only to that part of the room that is used for sound reproduction. Adjacent parts of the room – such as the dining area – do not need to be factored into the room size. If the room is higher than 3,5 m, multiply the room size by 1.5. If there is only little need for continuously high volume, you can also install the system in spaces that are slightly larger than 30 m².

Before using the loudspeaker set for the first time, carefully read this operating manual. Keep the manual in a safe place for later reference. If you have any questions, feel free to contact our technicians (ph. +49 (30) 300 9 300), or write an e-mail using the contact form provided on our website www.teufel.eu. Please provide your order number so that we can identify your purchase and provide the best possible support.

BEFORE you contact us with any questions, make sure to read the “Problems and solutions” section on page 15 of this operating manual. Further answers are provided in the “FAQ/Support” section of our website: www.teufel.eu.

Please take careful note of the safety guidelines on page 4 of this operating manual. Do not start using the loudspeakers before you have read this page.



Teufel

Unpacking · Included components

Please make sure that you have all the components of the system!

Attention:
Hold on to the cardboard boxes for at least eight weeks (duration of the right-of-return period). Lautsprecher Teufel will ONLY refund the full purchase price if the speakers are shipped back in their ORIGINAL PACKAGING!

Unpacking

Open the top flaps of the cardboard box, take out the styrofoam padding, and carefully lift the loudspeaker out of the box. We recommend holding on to all the original packaging in case you ever need to ship the speakers back to us for servicing. The Motiv 6 system is a complete speaker set that is available in two versions. The only difference between these lies in the types and constellation of the five satellite surround speakers:



◀ A 610 SW subwoofer

Included components



◀ MO 6 C centre speaker, with table mount

Motiv 6 Set 1

- ▶ 1 x A 610 SW subwoofer
- ▶ 1 x MO 6 C centre speaker
- ▶ 1 x table mount for MO 6 C
- ▶ 4 x MO 6 FR column speakers

Motiv 6 Set 3

- ▶ 1 x A 610 SW subwoofer
- ▶ 1 x MO 6 C centre speaker
- ▶ 1 x table mount for MO 6 C
- ▶ 2 x MO 6 FR column speakers
- ▶ 2 x MO 6 FCR satellite speakers



◀ MO 6 FR column speaker

Note:
The set's five passive speakers – MO 6 C centre speaker, MO 6 FCR satellite speakers and/or MO 6 FR column speakers – all have identical cabinets and components. The column speakers simply feature an integrated stand; however, this does not affect the sound.

You can freely assign the speakers as front, centre or rear speakers, depending on the layout of your room. However, we strongly recommend placing the speakers as matching pairs, i.e., the two column speakers TOGETHER as the front or rear speakers.



◀ MO 6 FCR speaker

Accessories

As different customers have different cable requirements, our systems do not ship with any standard speaker cables.

However, you can order suitable cables for the subwoofer and satellite speakers directly from us at

www.teufel.eu ("Accessories" section)

Accessories for the Motiv 6 system

The following accessories are available for the Motiv 6 system:

Teufel speaker cable 2 x 2.5 mm²



Highly flexible copper core (650 strands) with a transparent sleeve and polarity markings. In response to customer demand, all our audio cables are now pre-wired for typical usage lengths.

Teufel NF mono RCA cable



This cable is designed for connecting active subwoofers to AV receivers/amplifiers, and is doubly shielded against magnetic interference. A reliable connection is guaranteed by sturdy, gold-plated connectors. This blue cable is available in several different lengths (2,5 to 15 metres) to perfectly match your requirements.

Y adapter



1 x socket to 2 x connector. A Y adapter lets you feed a mono sub signal to both of the subwoofer's stereo inputs; this increases the subwoofer's overall volume.

Upgrading

The Motiv 6 system is configured for playback in a 5.1 surround setup. This configuration is designed to reproduce all the audio channels of a DVD and provides an excellent home theatre surround sound experience. The Motiv 6 speaker set can be used with any standard AV receiver, regardless of whether this offers 5.1, 6.1 or 7.1 surround.

Upgrade options for 6.1/7.1 AV receivers

If you wish to expand your 5.1 set into a larger surround system, you can purchase a range of add-on speakers:

MO 6 C centre speaker



If you own a 6.1 AV receiver, you can purchase this individual add-on speaker to expand your Motiv 6 5.1 set into a 6.1 system. Please note: The MO 6 C is designed for horizontal speaker placement only.

MO 6 FCR speaker



If you own a 7.1 AV receiver, you can purchase a pair of add-on speakers to expand your Motiv 6 5.1 set into a full-blown 7.1 system. Please note: The MO FCR 6 speakers are designed to be mounted upright on a shelf or on a wall.

MO 6 FR column speaker



If you own a 7.1 AV receiver, you can purchase a pair of add-on column speakers to expand your Motiv 6 5.1 set into a full-blown 7.1 system.

If you require any optional accessories, you can easily order these directly from the Accessories section of our online store:
www.teufel.eu

Speaker positions in the 5.1 configuration

General notes on speaker placement

Thanks to its unobtrusive aesthetics and sleek design, the Teufel Motiv 6 speaker system will easily blend into your living room. In order to get the best possible audio quality from your Teufel system, however, there are a number of speaker placement rules to consider; these apply particularly to home theatre use. As a general guideline, any home theatre system should be concentrated around the viewing area, i.e., that part of the room that contains the TV/screen and the main seating spots. If at all possible, the TV/screen should be placed centrally in relation to the viewing/listening spots.

Our speaker placement suggestions, shown over the next pages, are designed for the best possible multi-channel sound reproduction. In the reality of your living room, of course, there may be factors working against the suggested placements – your room layout, your furniture or even your partner! While our recommendations represent the audio purist's optimum layout, minor variations in placement will generally not affect the sound imaging very much. Modern AV receivers also offer a number of options to electronically compensate for compromises in speaker placement. Always remember: Our recommendations are not the be-all-and-end-all but a starting point. Ultimately, you will know best what works in your room, both visually and sonically. Trust your eyes – and your ears!

**When mounting a loudspeaker on a wall, always make sure to use screws and wall plugs that are sufficiently powerful and suited to the wall surface.*

Centre

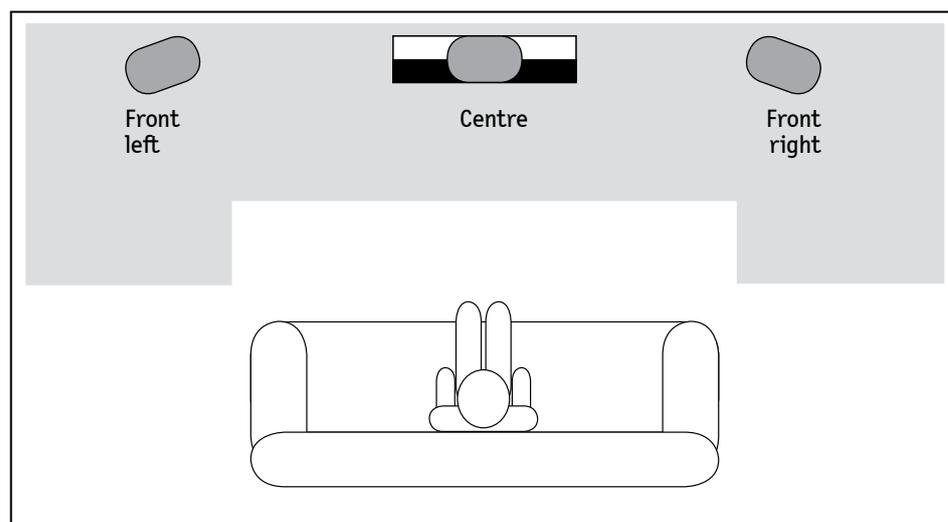
The centre speaker reproduces virtually all spoken sound, including most dialogue. In relation to the main listening spot, place the MO 6 C centrally under or above the TV/screen in order to create a physical unity between sound and image. Mount the centre speaker using the supplied table mount, or fasten it directly to the wall using the mounting brackets on the rear (make sure to use suitable screws/wall plugs).

Front

The front speakers should be positioned the same way as any conventional stereo speakers – forming an equilateral triangle with the listener. In a home theatre setup, the left and right front speakers should be equidistant to the TV/screen, mounted on the wall (MO 6 FCR satellite speakers) or free-standing (MO 6 FR column speakers). Should you need to position the column speakers further out, make sure to angle them towards the main listening spot.

As the speakers are magnetically shielded, they can be placed in close proximity to a TV tube. If you mount the MO 6 FCR speakers on the wall or on a bookshelf, make sure the speaker height is between 40 cm and 1.20 m (bottom edge). Make sure that the centre speaker and the two front speakers are positioned in a straight line, or on a slight arc with the TV/screen. If the distances between you and the speakers vary significantly, this will degrade the audio signal's spatial imaging. Make sure to align your speakers properly so they sound as good as possible.

Hint:
The column speakers sound best when positioned closely to the wall.



Speaker positions in the 5.1 configuration

Subwoofer

At the recommended crossover frequency of 120 Hz, the A 610 SW subwoofer can be positioned in the room very flexibly without affecting the output from the other loudspeakers. Usually, the ideal position is somewhere along the axis between the two front speakers, but you should feel free to experiment with placing it anywhere you like.

As the subwoofer is magnetically shielded, you can even place it near a TV tube.

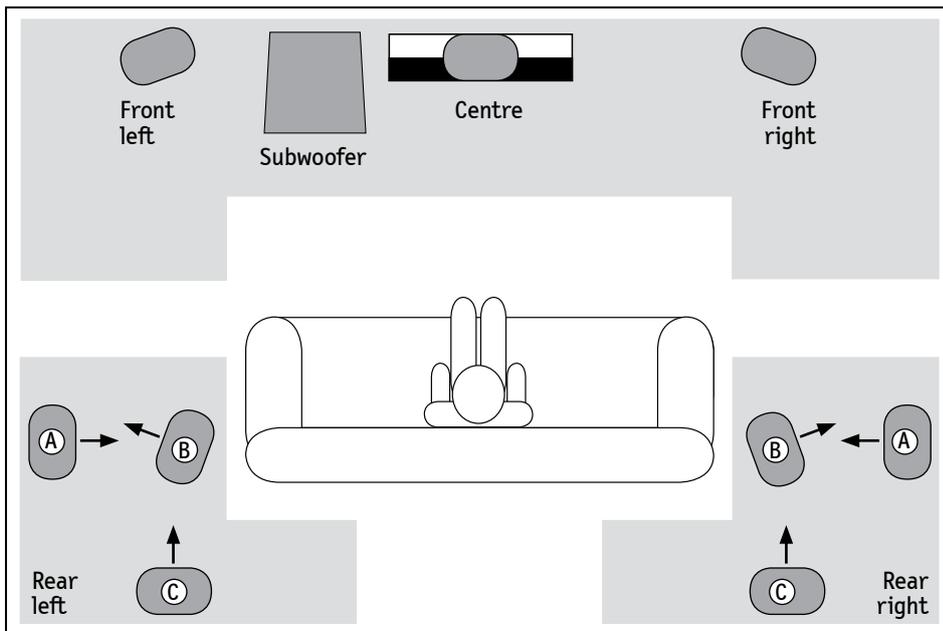
However, you should never put a TV set directly on top of the subwoofer – the bass vibrations may cause the TV to gradually slip off, which could severely damage both units and possibly cause injury.

Rear

Position the left and right loudspeakers for the rear of the room either to the side of or behind the main listening spot. The MO 6 FCR satellite speakers may be positioned as high as 2.10 m, e.g., on a shelf or mounted directly on the wall. We generally recommend that the rear speakers should not be lower in the room than the front speakers. The ideal angle for the rear speakers is parallel to the listener, offset by 20 degrees (A).

The rear speakers should always be at least 1.00 m away from the listener. If this is physically not possible in your room and the speakers have to be closer than 1.00 m, make sure that they are not directly facing you but are angled towards the wall (B).

Alternatively, you can create the required distance by elevating the speakers to a height of at least 1.20 m, or by placing them further back in the room (C).



We recommend you place the subwoofer somewhere in the grey front area.

We recommend you place the rear speakers somewhere in the grey rear area. The best default positions are indicated by A, B and C. The arrow indicates the speaker's projection.

Speaker positions in the 6.1 configuration

If you add an additional M0 6 C speaker to your 5.1 system (see page 7), you can make full use of a 6.1 AV receiver and expand your surround setup into a 6.1 home theatre system.

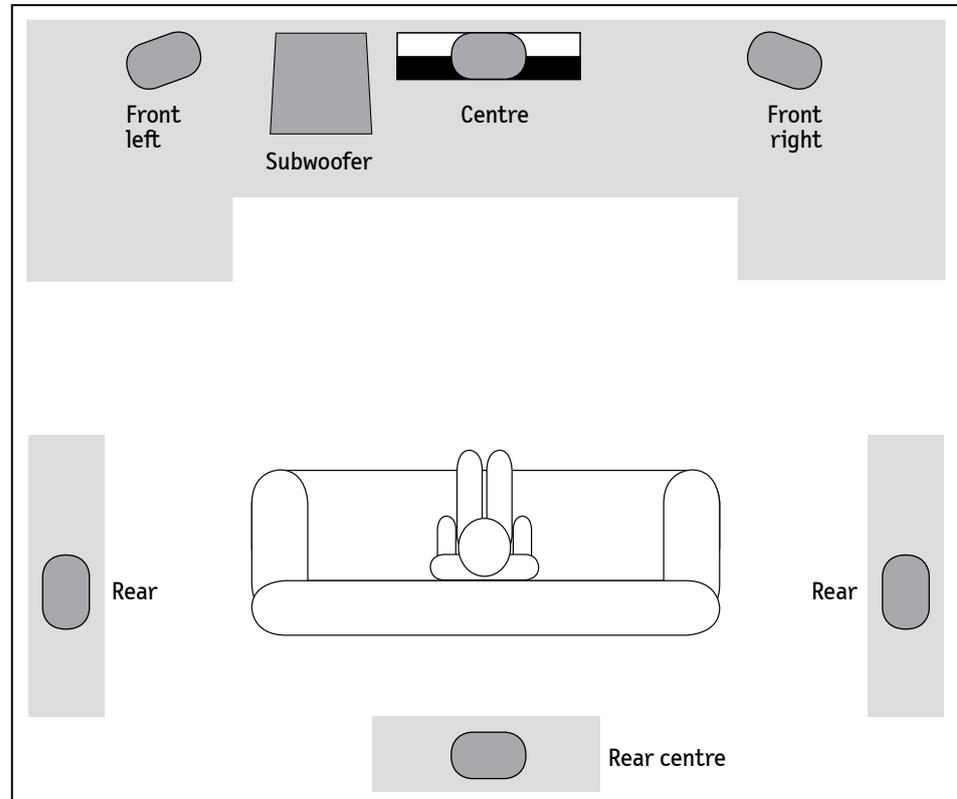
Front • Centre • Subwoofer • Rear (Side)

The arrangement of speaker boxes follows the same pattern as a 5.1 system. Please refer to “Speaker positions in the 5.1 configuration” on the previous two pages.

Rear centre

In an ideal 6.1 system, the rear effects speakers (rear sides) are positioned on the side walls facing the listening spot. The rear centre speaker should be positioned at the centre of the rear wall (height: 0.70–2.10 metres), equidistant to the two rear side speakers. All three rear speakers should be roughly at the same height. If this is not practical, you can compensate for any asymmetries by entering the distances of the individual speakers in the AV receiver’s “Speaker Setup” utility.

We recommend you place the subwoofer somewhere in the grey front area.



We recommend you place the rear speakers somewhere in the grey rear area.

Speaker positions in the 7.1 configuration

If you add a pair of MO 6 FCR satellite speakers or MO 6 FR column speakers to your 5.1 system (see page 7), you can make full use of a 7.1 AV receiver and expand your Motiv 6 set into a 7.1 home theatre system.

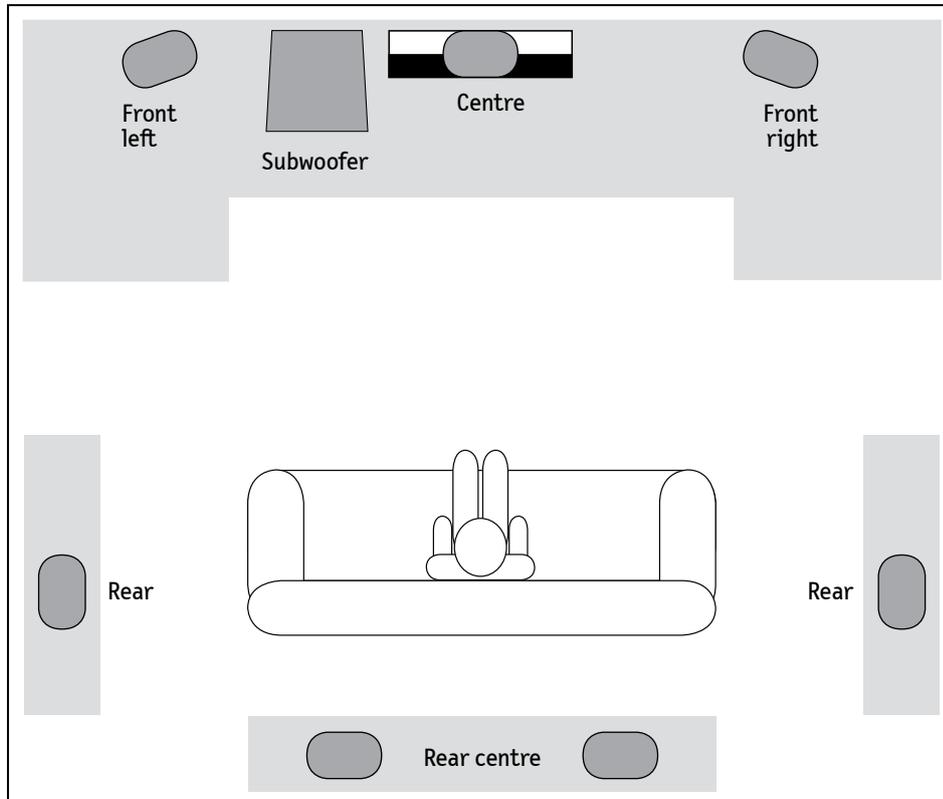
Front • Centre • Subwoofer • Rear (Side)

The arrangement of speaker boxes follows the same pattern as a 5.1 system. Please refer to “Speaker positions in the 5.1 configuration” on pages 8 and 9.

Rear centre

In an ideal 7.1 system, the rear effects speakers (rear sides) are positioned on the side walls facing the listening spot, and the rear centre speakers are positioned on the rear wall (height: 0.70–2.10 metres). All three rear speakers should be roughly at the same height.

If you picture a top-view geometry of your surround setup, the four rear speakers should ideally form an isosceles trapezium. Each side of the trapezium should be at least 1.00 m long. If the sides have differing lengths, or if the four rear speakers are mounted at different heights, you can compensate for such asymmetries by entering the distances of the individual speakers in the AV receiver's speaker management utility (“Speaker Setup”).



We recommend you place the rear centre speakers somewhere in the grey rear area.

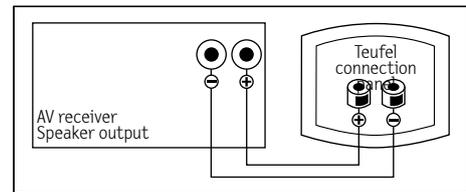
Connections

You can connect the Motiv 6 system to any modern Dolby Digital/DTS 5.1/6.1/7.1 AV receiver for a 5.1 setup with an active subwoofer. If your AV receiver is 6.1/7.1, simply ignore the Rear Centre Out(s). To make full use of a 6.1 AV receiver, you will need to install an additional MO 6 C speaker (see page 7).

If you already own a 7.1 AV receiver, you can expand your Motiv 6 system with two additional FR column speakers or FCR satellite speakers to create a full-blown 7.1 home theatre surround system.

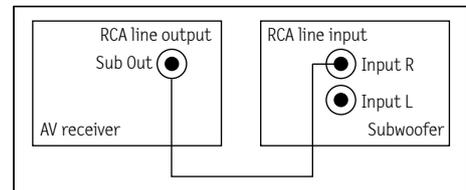
If you are using a 5.1 AV receiver, connect the front, centre and rear speakers as shown in the diagram. → **Fig. 1**

1. Front, centre and rear speakers



Connect the subwoofer output (Sub Out) of your Dolby Digital/DTS AV receiver to the right Line Input (R) of the subwoofer using a mono RCA cable. → **Fig. 2**

2. Subwoofer

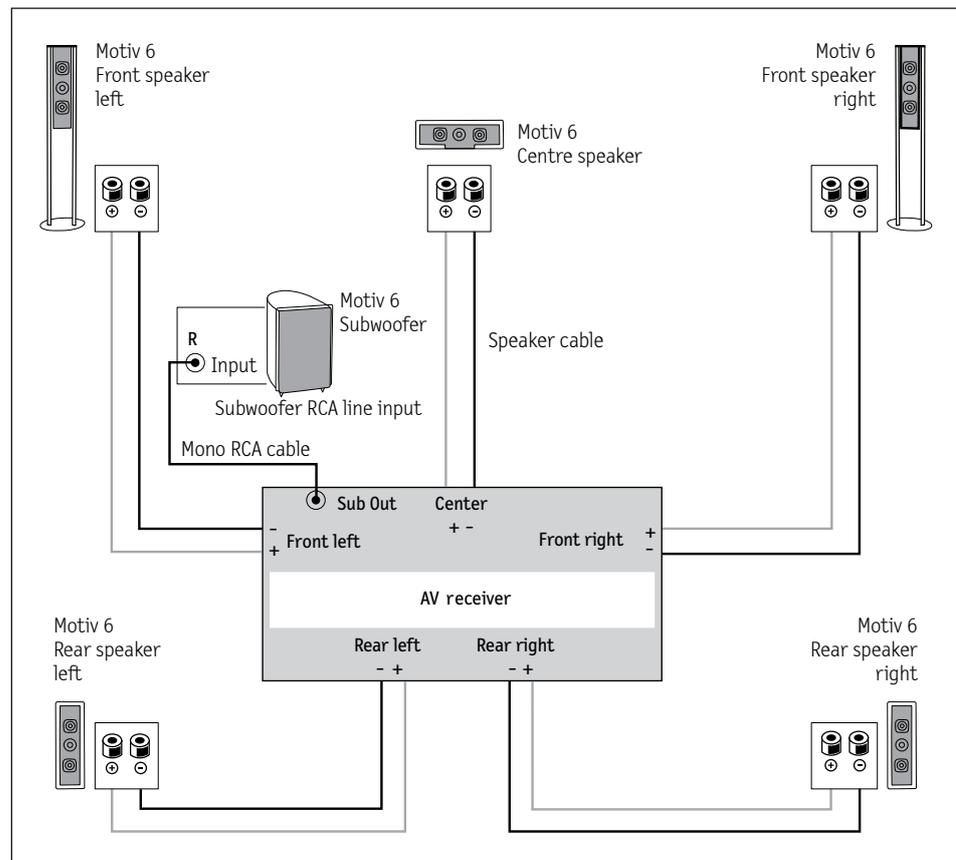


In this setup, the left input (Line Input L) is not connected. If you want to feed the Sub Out signal to both of the subwoofer's inputs, use a Y adapter (see Accessories, p. 7).

Connecting the speakers to an AV surround receiver (example: 5.1 setup). A 6.1/7.1 AV receiver additionally provides one or two Rear Centre Outs.

Note:
The set's five passive speakers – FCR satellite speakers and FR column speakers – have identical cabinets and components. The column speakers simply feature an integrated stand; however, this does not affect the sound.

You can freely assign the speakers as front, centre or rear speakers, depending on the layout of your room. However, we strongly recommend placing the speakers as matching pairs, i.e., the two column speakers TOGETHER as the front or rear speakers.



Setting up the AV receiver

To take full advantage of your Motiv 6 Home Theatre System with Active Subwoofer, set the "Speaker Setup" section of your AV receiver to "small" or "normal" (not "large") for the five surround speakers. This ensures that each speaker receives the right amount of signal, and that the subwoofer and front speakers have matching volumes.

Also in the receiver's "Speaker Setup" section (Bass Management/Speaker Management), make sure the subwoofer is set to "On". For the Motiv 6 system, set the crossover frequency to 120 Hz (if this is not available, the next best choices are 120/150/200 Hz).

Setting up the subwoofer

If your system is based around an AV receiver, set the subwoofer's frequency control to maximum; the AV receiver automatically determines the crossover frequency in relation to the subwoofer's output.

Modern AV receivers can also determine the subwoofer's phase automatically. This happens within the receiver's "Speaker Setup" utility, which analyses the distance between the different speakers and the listening spot. For this to work correctly, the subwoofer's own phase switch needs to be on "0°".

If your system uses an older-model AV receiver or another type of amplifier without a setting for the subwoofer distance, you can use the subwoofer's phase switch to manually adapt the phase to the other speakers. The goal here is for all the bass loudspeaker membranes that reproduce the frequency range around the crossover frequency to vibrate in the same direction. If the phase is set incorrectly, there may be phase cancellations between the bass frequencies, i.e., the bass is quieter and some of the low frequencies appear to drop out.

If your subwoofer is positioned between the front speakers, we recommend a phase setting of "0°" (grey area in the diagram on p. 9); if the subwoofer is positioned closer to the listening spot, a phase of "180°" may be more appropriate. Similarly, the "180°" setting may help to eliminate bass cancellations if you position the subwoofer in other areas of the room. As a rule, always set the phase switch to the position that enables the best bass reproduction.

The subwoofer's output volume may vary depending on usage, e.g., home theatre sound system or music playback. Whereas an action-packed DVD typically contains very defined sub bass signals, many music-only sources do not. This is especially noticeable if your system is calibrated for optimum DVD playback. To find the best compromise between differing sound sources, use your own subjective judgement.

Our recommendation is to determine the best subwoofer volume gradually over time.

Avoid configuring the subwoofer volume automatically via your AV receiver's integrated room analysis computer (advanced receivers only). Instead, set the subwoofer level in the Bass Management/Speaker Management section ("Speaker Setup") to a high value between +8 and +12 dB. This will guarantee that the subwoofer activates at the right times when in "Auto On/Standby" mode. You can then freely experiment with different volume levels on the subwoofer itself to find the best bass balance.

Controls (subwoofer)

What the icons mean



The lightning/arrow symbol inside an equilateral triangle informs the user about the possibility of a dangerous, non-isolated electrical current inside the device housing, indicating the risk of electrical shock.



The exclamation mark within the equilateral triangle, which can be seen on the back of the unit, indicates that there is important operating and service information for the user to read.



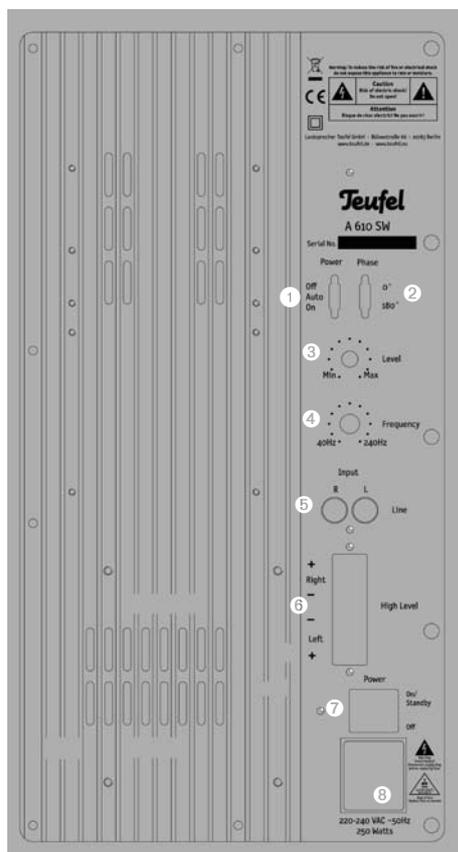
This product complies with the following European Union guidelines: 2004/108/EC and 2006/95/EC.



The "wastebasket" symbol printed on the type plates and amplifier labels of our products signifies that Lautsprecher Teufel ensures the proper disposal of its sold loudspeakers and subwoofers according to Germany's Electrical and Electronic Equipment 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.



Attention:

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

1 Power Function (Auto)

"On" means that the subwoofer is operational and permanently active. "Auto" means that the subwoofer is operational but is only activated once it receives an audio signal. The Teufel logo on the front panel lights up red. The subwoofer automatically switches to standby after 20 minutes of inactivity. The red light in the Teufel logo is now off.

2 Phase

This switch determines the phase relationship between the subwoofer and the front/centre speakers. If you are using a modern AV receiver and/or the subwoofer is positioned in the speaker setup as indicated on page 8 (grey area of drawing), set the phase to "0". With other setups, the "180" setting may produce better results.

3 Level

Use the "LEVEL" control to adjust the subwoofer's volume. In the receiver's bass management section, set the bass level to a high value, i.e., between +6 and +12 dB. Next, set the subwoofer's level control to 10 o'clock. While the AV receiver is outputting its white noise setup signal, slowly turn up the subwoofer level to the desired volume.

4 Frequency

Use this control to set the crossover frequency between the subwoofer's bass signal and the bass frequencies of the other speakers. If you are using an AV receiver, set the receiver's crossover frequency to 120 Hz and turn the subwoofer's frequency control to maximum (hard right).

5 Line Input

Connect the AV receiver's "Sub Out" to the subwoofer's "Line Input" using a mono RCA cable (optionally with a Y adapter).

6 High Level

Use these speaker sockets to connect the subwoofer to a conventional stereo amplifier or a surround receiver without a dedicated subwoofer output. Do not connect anything here if you are using a multi-channel AV receiver with a Sub Out.

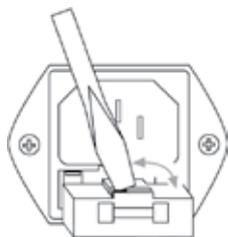
7 Power

Switch to "On" to power up the subwoofer; switch to "Off" to power it down.

8 Fuse

This is where the mains power fuse is located. When replacing the fuse, make sure the new fuse has the same rating.

The subwoofer is not working



If the power LED does not light up when you switch on the power switch, replace the fuse. Make sure that the replacement fuse has the same rating as the defective fuse. If the power LED and

the Teufel logo on the front panel are lit up (Power Function ❶ on “On”), turn the subwoofer volume level all the way down, unplug the subwoofer RCA cable from the amplifier, turn up the volume slightly and touch the tip of the RCA connector with your finger. If this produces a hum or crackle, the fault is with the amplifier or the amplifier settings. If the subwoofer remains completely silent, please contact our support team.

The subwoofer is making a humming noise

Hum may be caused by any connected audio device as well as by problems with the mains power. In most cases, excessive hum is caused by one of the following:

1. The subwoofer is connected to a different electrical circuit than the other components. Make sure that all connected devices are powered from the same electrical circuit, i.e., the same mains socket.
2. The antenna connected to the audio system or TV has a different ground potential to the antenna socket. To test this, simply disconnect all the antenna cables from the wall socket. If this makes the hum disappear, you will need a ground breaker (available from most electronics stores). Simply insert the ground breaker between the antenna socket and the TV/receiver.

3. A line filter (to be purchased separately) can also be useful for hum removal. Note that you will need to connect all your electrical devices to the line filter.
4. Some types of power multiboxes are also known to produce hum. Try eliminating your multibox and plug the subwoofer's power cable directly into the mains socket.
5. If possible: Unplug the mains cable, rotate the connector plug by 180°, and plug it back into the mains socket.
6. If you have trouble locating the source of the hum, check whether the subwoofer is less noisy when you plug it into the mains connection in another room. Also, try disconnecting the subwoofer's RCA cable from the receiver to see whether the hum is caused by one of the other connected devices.

The subwoofer is not activating automatically when in “Auto ON” mode

Some AV receivers default to a very quiet bass output on the Pre Out/Sub Out. As a result, the subwoofer fails to activate, as the weak signal does not cross its signal detection threshold. In order for the subwoofer to correctly activate/deactivate when in “Auto ON” mode, set the subwoofer's own level control quite low (e.g., 10 o'clock position) and increase the receiver's subwoofer output level in the “Speaker Setup” section – set it to the maximum value (+10 dB or +12 dB) if necessary. This should resolve any issues with the automatic signal detection. If it doesn't, you can always run the subwoofer in the regular “ON” mode, where it is permanently on.

Cleaning

Please take note of the following guidelines to protect the components and maintain the finish of your Teufel loudspeakers:

Avoid placing the speaker cabinets in direct sunlight. Avoid extreme temperature fluctuations

and protect your loudspeakers against humidity. When cleaning the speaker cabinets, only use dry or moist cloths. Never use abrasive or alcohol-based cleaning products. If you need to clean a speaker membrane, do so very carefully using a dry cloth.

Active subwoofer

Loudspeaker with integrated amplifier for the reproduction of bass frequencies. Very low frequencies can only be reproduced by large-size speakers. To permit a speaker system with compact front speakers, the bass frequencies are handled separately by a dedicated subwoofer unit. As bass frequencies travel largely non-directionally, the subwoofer can be placed out of sight, e.g., behind the couch or under a coffee table. The crossover frequency between the front speakers and the subwoofer varies from system to system, but is usually somewhere between 50 and 120 Hertz.

Auto On/Off function

The Auto On/Off function activates the subwoofer when an audio signal is detected at the input, and switches it off again after a set time of inactivity (approx. 20 minutes).

Centre

The central loudspeaker of the home theatre system. Surround sound for TV/film places most of the dialogue in the centre speaker. Because of this, excellent reproduction of speech is a vital quality of the centre speaker.

Cinema set

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Dipole

Dipole loudspeakers radiate sound in two directions. This makes them ideal as rear speakers in home theatre systems, as their radiation pattern mimics the loudspeaker arrangement in commercial cinemas. In a cinema setup, the rear audio channels are reproduced by several speakers that spread the sound around the room. Dipole speakers are designed to radiate sound indirectly so that it cannot be easily located. This distinguishes them from direct-radiating speakers.

Direct-radiating speaker

All conventional loudspeaker cabinets that directly radiate the sound at the listener are described as "direct-radiating speakers". In home theatre systems, direct-radiating speakers are primarily used for the sound channels of the three front speakers. In Teufel's Concert sets, they are also used for the rear channels.

Dolby Digital/DTS decoder

An electronic circuit to split digital multi-channel audio signals from DVDs into up to seven separate signals. "Dolby Digital" and "DTS" are different audio formats, so they require different decoders. Most AV receivers, DVD players and surround sound cards are equipped with both decoders.

Frequency/crossover frequency

The "crossover frequency" determines at which point in the frequency range the bass frequencies are separated off to the subwoofer. For example, a crossover frequency of 120 Hz means that all frequencies above 120 Hz are sent to the satellite speakers, and all frequencies below 120 Hz are sent to the subwoofer.

Level

The "Level" control on the subwoofer determines the subwoofer's volume. In a perfect speaker setup, all the speaker channels (including the subwoofer) are balanced in relation to the listening spot, i.e., all the speakers appear to have an equal volume.

Phase

The "Phase" control lets you adjust the subwoofer to the satellite speaker so that the membranes of all the speakers vibrate in the same direction ("phase") when reproducing signals around the crossover frequency. If the phase is set incorrectly, this may cause a reduced bass response or even bass cancellations. If the subwoofer is positioned between the front speakers, we recommend a phase setting of 0°; if the subwoofer is positioned closer to the listening spot, a phase of 180° may be more appropriate. Similarly, the 180° setting may help to eliminate bass cancellations if you position the subwoofer in other areas of the room. Always set the phase control to the position where the bass response is best.

Rear speaker

The rear speakers (→ dipole or → direct-radiating) mostly reproduce effects and atmospheric sounds. This creates a much more spatial sound field when playing back film sound and music.

Sub Out

Output on the receiver or amplifier to connect an active subwoofer using a mono RCA cable.

5.1/7.1 Pre Out

Preamp outputs on the receiver, or DVD player outputs. An analog audio signal (RCA connection) is provided for each channel.

6.1/7.1 surround sound format

In this surround sound format, the left and right rear speakers are complemented by a centre rear channel. Depending on the encoding format, this "Rear Centre" is either embedded into the stereo matrix for the left/right rear channels and then extracted during playback (e.g., THX® Surround EX, Dolby Digital EX), or it is transmitted as a separate signal (DTS Discrete). In reference to the more widespread "5.1" surround format, these formats are described "6.1". Practice has shown that the best surround results are achieved if the rear centre channel is reproduced by not one but two centre rear speakers. Because of this, AV systems that feature amplifiers and connections for two rear centre speakers are described as "7.1", although they are technically only reproducing a "6.1" signal.

Teufel

If you have any questions, suggestions or criticisms, please contact our support team:

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