



# Theater 4 Hybrid

5.2 Loudspeaker Set with Integrated Active Subwoofers  
M 420 F – M 420 C – M 420 R

**Teufel**

### **About this document**

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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](http://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](http://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
- ▶ 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 expose the units to humidity or moisture. Protect them from excessive humidity and do not place them in environments such as damp basements. Avoid operating the units near wet environments such as bathtubs, shower basins, hand basins, drains, swimming pools, etc. Also, avoid placing the units in areas that are permanently exposed to direct 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.

**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. Ca-

ble 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 (higher than 3/4), 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 Theater 4 Hybrid



### Dear Lautsprecher Teufel customer,

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

You are now the owner of a powerful and sophisticated loudspeaker system. All Teufel products are meticulously manufactured and fitted only with top-quality components.

Our Theater 4 Hybrid system is designed for audio playback in rooms sized up to 50 m<sup>2</sup>.

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](http://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. Further answers are provided on the “FAQ/Support” pages of our website ([www.teufel.eu](http://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. If the speaker set is shipped with speaker grilles, attach these now.

We recommend holding on to all the original packaging in case you ever need to ship the speakers back to us for servicing.

The Theater 4 Hybrid set is shipped as a complete 5,2 system:

### Included components

- ▶ 2 x M 420 F loudspeakers
- ▶ 2 x M 420 R loudspeakers
- ▶ 1 x M 420 C loudspeaker
- ▶ 2 x power cable

### Optional accessories for the Theater 4 Hybrid system

As our customers' setup requirements tend to vary considerably, the system does not ship with any audio cables, wall mounts or speaker stands. However, you can order suitable cables for the speakers and subwoofers directly from us, as well as any required mounts or stands.

An overview of the accessories available for your Theater 4 Hybrid system is provided on the following page.



◀ M 420 F



◀ M 420 R



◀ M 420 c



◀ Power cable

## Accessories (optional)

### Theater 4 Hybrid EX set



With an additional “EX set,” you can expand your Theater 4 Hybrid 5.2 system into a 7.2 system that takes full advantage of a 7.1 AV receiver. The EX set consists of two additional M 420 R speakers that are placed behind the listening spot and between the two rear side speakers (see page 10).

### Y adapter



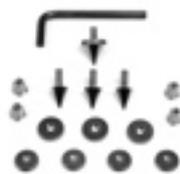
1 x connector to 2 x socket. This cable adapter splits the mono Sub Out of an AV receiver into two signals. This is necessary if you are running two subwoofers, such as those contained in the M 420 F boxes. Without a Y adapter, you will not be able to run both the subwoofers in your Theater 4 Hybrid system.

### Teufel NF mono cinch cable



This cable is designed for connecting active subwoofers to AV receivers/amplifiers, and it is shielded against magnetic interference. A reliable connection is guaranteed by sturdy, gold-plated connectors. The cable is available in set lengths between 2.5 and 15 metres. Note that the Theater 4 Hybrid system requires two of these cables.

### Teufel satellite spikes



These solid spikes, offered in a set of four, are for lifting the M 420 F subwoofer/satellite speaker off the floor. This prevents unwanted bass resonances in the floor. The set consists of four spikes, four anchor nuts, one allen key, four pad rings for protecting the floor surface, and four distance rings for compensating any unevenness in the surface.

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



Highly flexible copper core (650 strands) with a transparent sleeve and polarity markings. The 2 x 2.5 mm<sup>2</sup>-cable can be used for cable distances up to 15 metres. For longer distances, we recommend the thicker 2 x 4 mm<sup>2</sup>-cable. In response to customer demand, our cables are now pre-wired for lengths between 10 and 50 metres.

### Teufel speaker cable 2 x 4 mm<sup>2</sup>



Hundreds of ultra-thin, low-oxygen copper wires (protected by a thick, flexible, transparent plastic sleeve that withstands almost any stress) ensure that your audio signals are passed to the speakers cleanly and without being compromised by underdimensioned cabling. Our cables are pre-wired for practical usage lengths between 10 and 50 metres.

*If you require any optional accessories, you can easily order these directly from the Accessories section of our online store:  
[www.teufel.eu](http://www.teufel.eu)*

### M 310 P “Caesar” speaker stand



This elegantly curved speaker stand features a sturdy metal bracket and a solid glass plate base. It is designed for the centre and rear speakers of the Theatre 4 Hybrid system. The speaker cable is discretely concealed inside the stand.

## Accessories (optional)

### Teufel banana plugs



These high-quality, multi-purpose speaker connectors from Teufel are an affordable option to ensure faultless connections between your loudspeakers and amplifier/receiver. The rugged banana-design screw connector securely holds cables up to 10 mm in diameter. Low-resistance plug connections are ensured by flexible spring contacts and solid gold plating. Banana plugs are sold in pairs only, marked red and black respectively. The Theater 4 Hybrid system requires 10 banana plugs for a 5.2 setup, or 14 for a 7.2 setup.

*If you require any optional accessories, you can easily order these directly from the Accessories section of our online store: [www.teufel.eu](http://www.teufel.eu)*

### Teufel L-Lock wall bracket



A versatile wall bracket for mounting speaker cabinets – designed by Teufel. Most Teufel speakers can be mounted very easily using this wall bracket, with no holes needing to be drilled into the cabinets. This mounting bracket is perfect if you need to tilt your M 420 R rear speakers horizontally (e.g., if you are mounting them on the rear wall). The M 420 R cabinets provide a fitting for an M6 packing screw on the cabinet base, which is used for attaching them to wall mounts or speaker stands.

### VLB 100 wall mount



The VLB 100 is designed for heavy rear speakers such as the Teufel M 420 R, providing a maximum load capacity of 25 kg on a continuous horizontal angle mount. Installation is quick and easy thanks to a simple lock-in mechanism. The wall holder is elegantly designed with a silk matte black finish and conceals the speaker cables internally.

### Teufel Accessory Bundles

Have a look at our four Accessory Bundles – these contain a variety of speaker cables, mono cinch cables (subwoofer) and banana plugs at discounted prices. Save up to 15%!\*

#### Accessory Bundle 1

- ▶ 30-metre speaker cable, 2 x 2.5 mm<sup>2</sup>
- ▶ 1 NF mono cinch cable, 2.5 metres
- ▶ 10 banana plugs

#### Accessory Bundle 2

- ▶ 30-metre speaker cable, 2 x 2.5 mm<sup>2</sup>
- ▶ 1 NF mono cinch cable, 5 metres
- ▶ 10 banana plugs

#### Accessory Bundle 3

- ▶ 30-metre + 20-metre speaker cable, 2 x 2.5 mm<sup>2</sup>
- ▶ 1 NF mono cinch cable, 5 metres
- ▶ 10 banana plugs

#### Accessory Bundle 4

- ▶ 30-metre speaker cable, 2 x 4 mm<sup>2</sup>
- ▶ 1 NF mono cinch cable, 2.5 metres
- ▶ 10 banana plugs

*\* Note:  
When putting together a 7.2 set, you will need four additional banana plugs as well as additional speaker cables on top of the standard Accessory Bundles.*



## Speaker positions in the 5.2 configuration

### General notes on speaker placement

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.

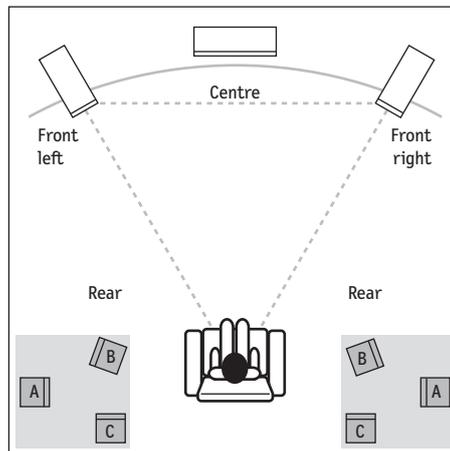
Our speaker placement suggestions, shown over the next pages, are designed for the best possible multi-channel sound reproduction in your home. In the reality of your living room, of course, there may be factors working against the suggested placements. While our recommendations represent the audio purist's optimum layout, 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!

### Centre

The centre speaker reproduces virtually all spoken sound, including most dialogue. In relation to the main listening spot, place the speaker cabinet centrally under or above the TV/screen in order to create a physical unity between sound and image. If this requires any horizontal or vertical angling, we suggest using one of our additional speaker mounts: L-Lock bracket (horizontal angles only) or VLB 100 (horizontal and vertical angles). The speaker cabinet already has an M6 packing screw in its base that is designed to fasten the cabinet to the L-Lock mount. The packing screw can also be used to fasten the cabinet to an M 310 P speaker stand. If you mount the centre speaker on a stand, this automatically ensures an ideal speaker height.

### Front

The M 420 F 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 TV/screen should be centred between left and right front speakers. There are two different versions of the M 420 F, with the subwoofer speaker pointing to the left and to the right, respectively. Neither of the speaker boxes is designated as “Left” or “Right”; you can freely decide whether to point the subwoofers outwards (to the wall) or inwards (towards the centre). When the subwoofers are pointed at the wall, the reflections will increase the overall bass level. We recommend you try out both setups to see which sounds best in your room. Also be aware that you can further modify the bass level with a switch on the speakers' rear panel (see page 14).



### Rear

Position the left and right rear loudspeakers at the rear of the room with a slight offset angle (around 20 degrees). Try to place the speakers at an equal height, ideally on a speaker stand. If you are using wall mounts, the base of the speakers should be no higher than 2.10 m. We generally recommend that the rear speakers should not be lower in the room than the front speakers. Direct-radiating rear speakers such as the M 420 R should be positioned at least 1.00 m away from the listener (A).

If this is physically not possible in your room and the speakers have to be closer, 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 rear speakers higher than the front speakers (C), or by placing them further back in the room.

### Hint:

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.

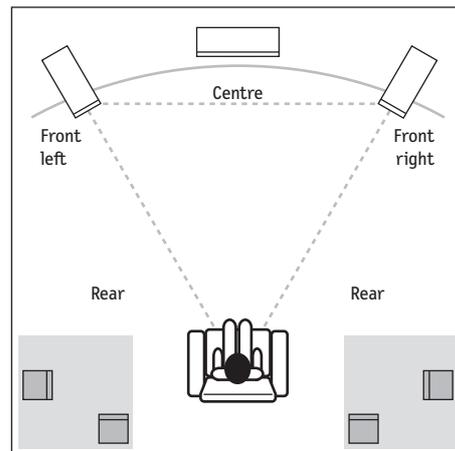
Place the rear speakers within the grey areas.

## Speaker positions in the 7.2 configuration

If you have augmented your Theater 4 Hybrid set with an EX set (two additional rear speakers – see page 7), you can make full use of your 7.1 AV receiver and expand your surround setup into a 7.2 home theatre system.

### Front • Centre • Rear (Side)

The arrangement of speaker boxes follows the same pattern as a 5.2 system. Please refer to “Speaker positions in the 5.2 configuration” on the previous page.



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

### Rear centre

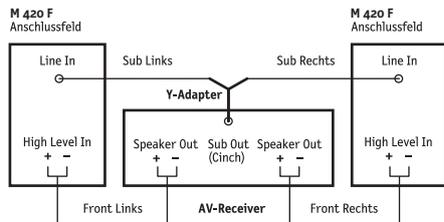
In an ideal 7.2 system, the rear effects speakers are positioned on the side walls facing the listening spot, and the rear centre speakers are positioned on the rear wall (height: 1.50–2.10 metres).

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/amplifier's “Speaker Setup” utility.

## Connections in a 5.2 system

### Connecting the integrated active subwoofers

For connection purposes, treat the M 420 F hybrid boxes just like two separate active subwoofers. As there are two subwoofers, you will need a Y adapter (see page 7) to split your AV receiver's Sub Out into two.



Using two separate mono cinch cables, connect the Y adapter's outputs to the M 420 F boxes. Each of the hybrid boxes has a cinch "Line In" for this purpose. On the connection panel, there is also an input source switch. Set this to "AV Receiver" to ensure the correct filtering and phasing of the subwoofer signal.

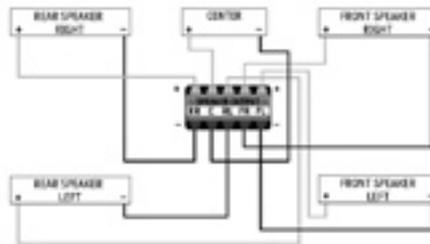


### Connecting the satellite speakers

Connect the Theater 4 Hybrid speakers to any standard 5.1/6.1/7.1 AV receiver to set up a 5.2 surround system. If your AV receiver is 6.1/7.1, simply ignore the Rear Centre Out(s).

If you have a modern 7.1 AV receiver, you can expand the Theater 4 Hybrid with an EX set consisting of two additional M 420 R speakers (see page 7) to create a full-blown 7.2 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. A 6.1/7.1 AV receiver additionally provides one or two Rear Centre Outs.



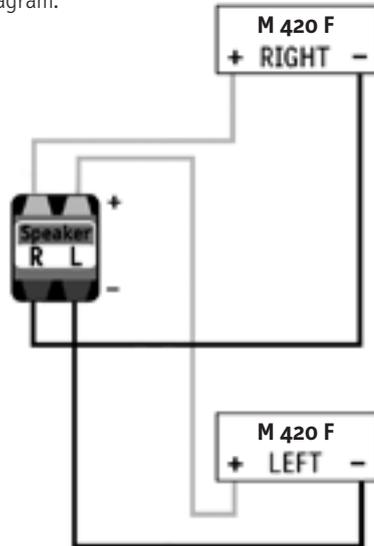
#### Note:

With the expanded 7.2 speaker set, connect the additional L/R rear centre speakers to the 7.1 AV receiver's L/R Rear Centre Outs.

Connecting the speakers to an AV surround receiver (example: 5.2 cinema system)

## Connecting the M 420 F to a HiFi stereo amplifier

The hybrid active/passive M 420 F boxes can be used with any conventional stereo amplifier/receiver. Connect the M 420 F boxes as shown in the diagram.



First, you need to connect the ends of your speaker cables to the L/R speaker outputs of your amplifier/receiver and to the “High Level” speaker terminals of the two column speakers.

If you are using new cables, crimp off the plastic sleeves at all the end points (approx. 7 mm) and twirl up the exposed copper ends. Both the speaker cabinets and the amplifier/receiver have speaker terminals marked [+ ] and [- ]. Make sure that the connections on your speakers match the polarity of the amplifier outputs: always connect the plus pole of the speaker to the plus pole of the amplifier, and correspondingly the minus pole of the speaker to the minus pole of the amplifier (“Speaker Output”). On the M 420 F, unscrew the fitting of each speaker terminal to reveal a small hole. Insert the exposed tip of the speaker cable into the fitting, and repeat the procedure for the other speaker terminal.



The M 420 F passes the stereo signal from its speaker terminals to the internal passive tweeter/midrange unit and the active subwoofer. As the subwoofer is active, you have to turn on the “Power” switch for the internal amplifier to work.

A separate subwoofer audio cable is not required; the “Line In” socket for the subwoofer is not used in this configuration.



### Setting up the AV receiver/amplifier

For connection purposes, treat the M 420 F hybrid boxes just like two separate active subwoofers. In the Speaker Setup, switch the subwoofer channel to “On”. As a crossover frequency, select 100 Hz (if this is not available, 120 Hz and 90 Hz are the next best options). The midrange speakers and tweeters of the column speakers function just like any conventional surround satellite speaker. Therefore, the settings for the front speakers should be the same as for the centre and rear speakers – “Small” or “Normal”, NOT “Large”.

The subwoofer’s output setting in the AV receiver’s menu 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 judgment.

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 provided in the bass management/speaker management section (“Speaker Setup”) to a high value, such as +4 to +12 dB; this will guarantee that the subwoofer activates itself at the right times when in “Auto On/Standby” mode.

You can then use the subwoofer’s own level control to experiment with different bass levels that are suited to your various listening scenarios.

### Setting up the subwoofer

“Bass Level” switch +3dB/0 dB/-3 dB



The response of a speaker cabinet is always affected by the room it is placed in.

To help you find a good balance between the M 420 F’s active subwoofer and passive midrange/tweeter section, you can adjust the subwoofer’s volume level.

Experiment to find out which setting sounds best in your listening environment. This switch can be very useful if you are running the speakers off a conventional stereo amplifier. Multi-channel amplifiers usually have their own controls for adapting the subwoofer level, so in this case you should be able to leave the switch at “0 dB”.

## M 420 F Controls

### 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: 89/336E WG and 73/23 EWG.



The "wastebin" 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.

### M 420 F rear panel



#### 1 Auto – On

With this switch, you can select whether the subwoofer is on permanently ("On") or only when a signal is detected ("Auto"). In "Auto" mode, the LED (4) is initially on green, and the subwoofer is running. After a period of inactivity for 10–15 minutes, the subwoofer reverts to standby mode, and the LED is red. As soon as the subwoofer detects a signal from the amplifier/receiver, it resumes operation, and the LED is green again.

#### 2 Stereo Amp – AV Receiver

With this switch, you can configure the loudspeaker's internal circuits according to input source – "Stereo Amp" for a conventional stereo signal, or "AV Receiver" for a multi-channel surround signal with filtering and polarity predetermined by the receiver.

#### 3 Bass Level -3dB/0 dB/+3 dB

This switch controls the balance between the active bass signal and the passive midrange/tweeter signal. The bass level can be increased by +3 dB or reduced by -3 dB. If you do not want to change the balance, leave the switch at "0 dB". This switch is useful to adapt the speaker's frequency balance if you are feeding it a conventional stereo signal. Multi-channel amplifiers usually have their own controls for adapting the subwoofer level, so in this case you should be able to leave the switch at "0 dB".

#### 4 Power

This LED indicates the operational status: LED on = unit on. LED off = unit off.

#### 5 Line In

Connect the AV receiver's "Sub Out" to the subwoofer's "Line input" using a Y adapter and a mono cinch cable.

#### 6 High Level In

These inputs are connected to the M 420 F's passive midrange/tweeter unit. Plug in the speaker cables coming from the AV receiver's Front Speaker outputs (L/R) here.

#### 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.

### The subwoofer is not working



If the Power LED on the rear panel does not light up, replace the fuse with a fuse of equal rating (see page 14, ⑧).

If the Power LED lights up, unplug the subwoofer cinch cable from the amplifier, set the “Bass Level” control to +3 dB, and touch the tip of the cinch 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 producing 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 (including your computer) 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. Make sure you can return the line filter for a refund if it does not produce the desired results.
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 (e.g., using an extension cable). Also, try disconnecting the subwoofer's cinch cable from the receiver to see whether the hum is caused by one of the other connected devices – LCD/plasma screens can be particularly noisy.

### 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.

# Teufel

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

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