

# Instruction Manual

## Vifa Touch VT5.5 speaker system

### Introduction

The staff at Vifa would like to welcome you into a world of true audiophile sound and movie reproduction. Since 1993, Vifa has been engineering some of the world's best transducers and today, the Vifa product range has evolved into complete Home Theatre Systems.

Your new Vifa Home Theatre Systems is designed as a true system, in which all units are designed for each other. The result of this approach is a system that is easy to install and operate and that offers excellent sound and movie quality. Your new Vifa Home Theatre System will give you exciting music and movie experiences for years to come. Before installing the products, we invite you to take advantage of the instructions and hints you will find in the following. Enjoy the movies!

### Placing your speakers

In normal living rooms, ideal placement of the speakers is often not practical, and some compromises are necessary. To achieve the best possible result, we recommend the following guidelines:

The distance between the two front speakers left and right and the listening position should be the same. This is illustrated with an  $\lambda$  in figure 1.

The ideal surround speaker placement is slightly behind you, one in each side, the speakers facing your ears for optimum sound field.

The centre speaker should be placed above or below the screen, half way between the two front speakers.

Figure 1



As a minimum, try to confer with the following:

- Keep similar distance between the listening position and the two main speakers left and right. The minimum distance should be app. 2 meters (6 feet).
- Keep the distance between your ears and the two surround speakers the same. Try to keep the height level from the floor the same for the two surround speakers.
- Keep the centre speaker half way between the two main speakers.
- Try to avoid any obstacles between your ears and the speakers.
- Avoid placing the speakers in corners or close to the walls as this will enhance the bass to undesired levels and reduce the perceived sound field.

The mirrored left and right sidefiring subwoofer drivers can be placed either facing inwards or outwards.

Despite the fact that the sub output is omni directional below the crossover point, we recommend placing the subs facing inwards. By doing so, impulse response and coherence between the sub and low mid units will be optimised and the sub performance will be less dependent on room acoustics.

However, if a large object is located between the subs (a television or large piece of furniture), place the subwoofer modules so that the woofers face to the outside.

Note: The strong magnet on the subwoofer may distort the picture on TV screens, so try to keep a distance of minimum 100 centimetres from the sub to the TV set. LCD or Plasma screens will not be influenced by the sub. Or try to change the orientation of the subwoofer by switching left and right speakers.

### Connecting your speakers

A good connection between your amplifier and the speakers is very important. We recommend that you use dedicated speaker cables for the connection of your speakers.

The terminal for the front speakers is located under the foot. Please lay the speaker carefully on the side using some soft carpet or pillows to avoid scratching the surface while connecting the cables.

***Before connecting the speakers turn off the main power to the amplifier or receiver!***

Start by stripping off the insulation on the wire and twist the treads before inserting the wire in to the terminal.

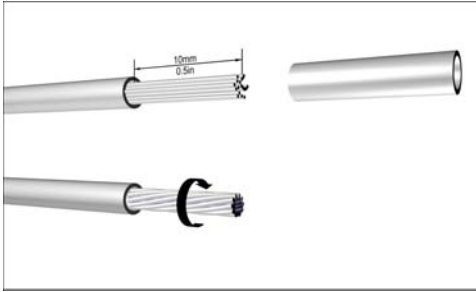


Figure 2

Be careful not to insert the insulated part of the wire in to the terminal because this will cause a bad connection.

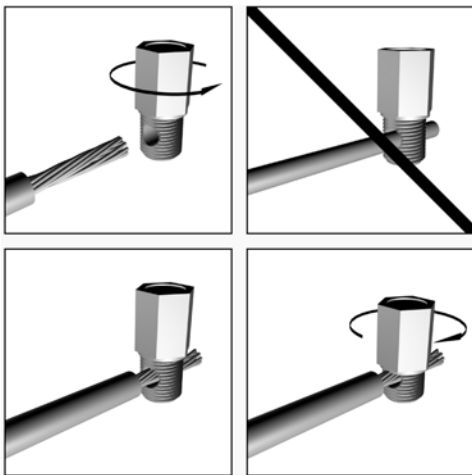


Figure 3

Please also notice that the bridges connecting the two terminals need to be fully inserted in the terminal to provide good contact.

It is very important for the sound image and bass reproduction that the positive (+) terminal on your amplifier is connected to the positive (+) terminal on the speaker and likewise that the negative (-) terminal on the amplifier is connected to the negative (-) terminal on the speaker. This ensures correct phase.

The surround receiver has a connector for each of the speakers and it is important to connect the speakers to the corresponding connector. This means that the front speakers should be connected to the front output terminal of the receiver (R&L), the centre should be connected to the centre output

terminal (C) and the surround speakers should be connected to the surround output terminal (SR&SL).

Please see the illustrations below in figure 4.

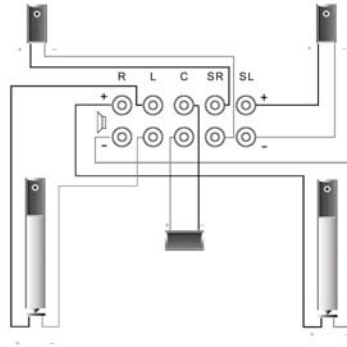


Figure 4

## Biwiring

The 2 pairs of terminals is designed for bi-wiring if desired. On delivery, the separate pairs are connected together with links for use with a single cable.

For single cable connection, leave the links in place and use either pair of terminals on the speaker.

To bi-wire, remove the links by loosening the terminal caps and use a separate cable from the amplifier to each pair of terminals. This can improve the resolution of low-level detail.

Observe the correct polarity as mentioned in "Connecting the speakers".

**Note: When bi-wiring, incorrect cable connection will impair the tonal balance and bass output severely.**

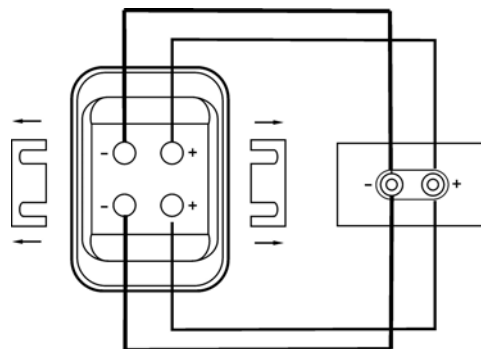


Figure 5

# Surround sound Bass Management

The ideal surround speaker system is a full range speaker for each channel including the centre channel and surround channels. In a normal living room environment, big and bulky full range speakers are not practical and therefore the idea of low frequency or bass management was invented. By redirecting the low frequency or bass sound intended for each speaker channel to the main front speakers or to a dedicated subwoofer, it is possible to reduce the size of the centre and surround speakers to a more suitable size.

In most receivers it is possible to select small or large for each speaker in the system. The subwoofer can also be switched on or off.

We recommend the following settings of your receiver bass management system. Please refer to the receiver manual for instruction on how to change the speaker settings.

### Without subwoofer:

*This setting must be chosen, when you do not have a dedicated subwoofer*

Front speaker:	“Large”
Centre speaker:	“Small”
Surround speaker:	“Small”
Subwoofer:	“Off”

### Including a subwoofer:

*This setting must be chosen when you have a powered subwoofer that is connected to the subwoofer output on your receiver.*

Front speaker:	“Large“
Centre speaker:	“Small“
Surround speaker:	“Small“
Subwoofer:	“ON“

## Delay settings

In the ideal surround sound speaker placement, all speakers have the same distance to your ears. In most normal living environments, the surround speakers and centre channel are typically closer to your ears than the front speakers left and right. Sound travels relatively slowly (about 34 cm/1 feet a milli-second). This means that if the surround speakers are closer to your ears than the front speakers, the sound from the surround speakers will reach you audibly before the sound from the front speakers. When the surround speakers are closer to you than the front left and right, the echo or

ambience information will reach you before the actual sound that caused the echo.

This way the sound image will be distorted and your attention will continuously be drawn to the rear speakers instead of the front where the movie is. To compensate for this, delay can be added to the centre and surround speaker channels.

The delay for each channel is found in the following way:

### Set delay for Centre channel

First measure the distance from the normal listening position to the front left or right speaker. Then measure the distance from the listening position to the centre speaker. The delay setting for the centre speaker is then calculated as the front speaker distance minus the centre speaker distance. If you calculated the difference in feet the approximate delay setting in milliseconds corresponds to the number of feet.

If you calculated the difference in meters please divide by 0,34 to calculate the needed delay in milliseconds.

If you do not have a calculator the division by 0,34 can be done roughly by multiplying with 3 instead.

### An example: (feet)

The distance to the main speakers is 7.5 feet the distance to the centre speaker is 6 feet.

Difference is 1.5 feet corresponding to a delay for the centre speaker of 1.5 milliseconds.

### An example: (meters)

The distance to the main speakers is 2.5 meters.

Distance to the centre speaker is 2 meters. Difference is 0,5 meters.

0,5 meters divided by 0,34 (or multiplying by 3) corresponds to a delay setting of 1,5 milliseconds.

In both examples the setting of delay for the centre channel should be set at 1.5 milliseconds.

### Set delay for Surround speakers

Measure the distance from the normal listening position to the front left or right speaker.

Measure the distance from the listening position to the surround speakers.

The delay setting for the surround speakers is calculated as the front speaker distance minus the surround speaker distance. If you calculated the difference in feet the approximate delay setting in milliseconds corresponds to the number of feet.

If you calculated the difference in meters please divide by 0,34 to calculate the needed delay in milliseconds.

### An example: (feet)

The distance to the main speakers is 7.5 feet the distance to the centre speaker is 3 feet.

Difference is 4.5 feet corresponding to a delay for the centre speaker of 4.5 milliseconds.

An example: (meters)

The distance to the main speakers is 2.5 meters. Distance to the centre speaker is 1 meter. Difference is 1,5 meters.

1,5 meters divided by 0,34 (or multiplying by 3) corresponds to a delay setting of 4,4 milliseconds which we will round up to 4,5 milliseconds.

In both examples the setting of delay for the centre channel should be set at 4.5 milliseconds.

Some advanced receivers will let you input the measured distances directly and the delay is then calculated automatically. Consult your receiver manual for setting of the delay.

## Cleaning

A soft damp cloth can be used to wipe off the surface effectively.

Please do not use any detergent or strong cleaning agents to clean your speakers.



Figure 6

## Warranty

All Vifa loudspeakers are covered by a 5 year limited warranty from the date of purchase. Please keep the receipt from your dealer as documentation and contact your dealer for warranty inquiries.

The warranty covers manufacturing and material defects, except:




- Defects caused by misuse or improper installation
- Defects caused by accidents, stroke of lightning, or other force major events.
- Defects caused by repair by non-authorized service centre.
- Defects caused by the use of non-original spare parts.
- Defects on products with altered or missing serial number
- Other defects caused by conditions outside Vifa's control

Transportation costs for servicing are not covered by the Warranty.

Vifa will only be responsible of repairing or replacing defective parts and is not responsible for indirect losses or damages arising from the use of the products. A replacement cannot exceed the value of the product under warranty.

# IMPORTANT SAFETY INSTRUCTIONS

Congratulations with your new subwoofer from Vifa. Since your new sub runs on mains voltage you have to take good care when connecting and using it.

	<p><b>Caution:</b> To Reduce The Risk Of Fire Or Electric Shock, Do Not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personel.</p>
	<p>This symbol, wherever it appears, alerts you to the presence of un-insulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.</p>
	<p>This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.</p>

**WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. 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. DO NOT OPEN THE APPLIANCE, NO USER SERVICEABLE PARTS INSIDE**

**CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.**

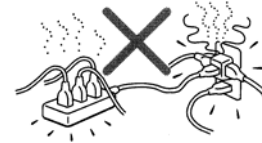
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- 15. Do not overload wall outlets or extension cord as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated receptacles, have it replaced by your service technician.



- 16. This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local Power Company. For products intend to be operated from battery power, or other sources, refer to the operation instructions.
- 17. When replacement parts are required, have the service technicians verify that the replacement parts he uses have the same safety character. Use of replacements specified by the product manufacturer can prevent fire, electric shock, or hazards.
- 18. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the product is in safe operating condition.

**DECLARATION OF CONFORMITY**

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards:

EN60065, EN55013, EN55020, EN61000-3-2 and EN61000-3-3.

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# Instruction Manual

## Vifa Subwoofer VT5.5W

### Introduction

Vifa welcomes you into a world of true audiophile Home Theatre performance. Since 1933, Vifa has been engineering some of the world's best transducers and today, the Vifa product range has evolved into complete Home Theatre Systems.

Your new Vifa Home Theatre Subwoofer is designed to integrate with our speaker systems as a system in which all units are designed for each other. The result of this approach is a system that is easy to install and operate and which offers excellent sound and movie quality.

Your new Vifa Home Theatre Subwoofer will give you exciting music and movie experiences for years to come.

Before installing the products, we invite you to take advantage of the instructions and hints you will find in the following. Enjoy the movies!

### Placing your Subwoofer

In normal living rooms, ideal placement of the speakers is often not practical, and some compromises are necessary. To achieve the best possible result, we recommend the following guidelines

The best Subwoofer placement is behind the main front speakers left and right. We recommend placing the subwoofer in a corner where the walls will help to amplify the low frequencies.

If a corner placement is not possible the second best is aligned with the front speakers close to the wall behind the front speakers. The third best placement is along one of the sides of the room.

Try by any means to avoid a symmetrical placement of the subwoofer in the room, because this placement typically does not produce a very good bass response.

The subwoofer is not magnetically shielded so placement near a TV set will distort the picture and must be avoided.

If you see discoloration on the TV set, just move the sub away or try to change the angle. Plasma or LCD screens are not sensitive to the magnet field produced by the subwoofer.

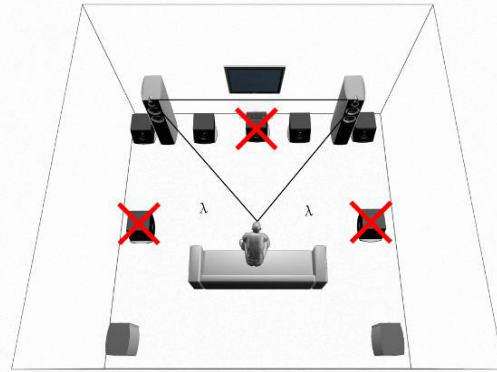


Figure 1 Recommended placement of the sub

### Connecting your subwoofer

Before connecting or changing connections on your subwoofer please make sure to power off the subwoofer and receiver.

The subwoofer has three different inputs:

ONLY one type of input should be used at one time. This means that if the SW input is used NONE of the other inputs should be used and vice versa.

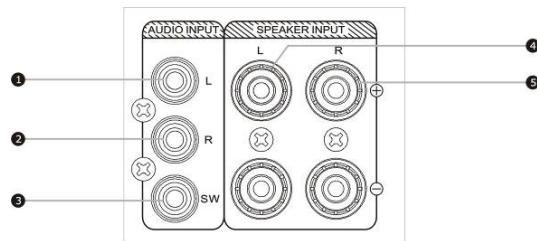
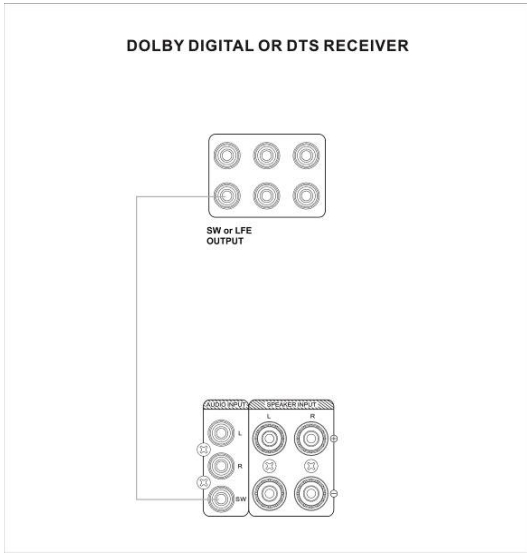


Figure 2 Input connections

#### 3. SW: (recommended input)

This input is connected to the Subwoofer or LFE output from your Home Theatre receiver. All receivers capable of Dolby Digital (AC-3) or DTS sound decoding should be connected to this input. The cross over adjustment knob has no function when using this input because the filtering is handled by the signal processing in the receiver.

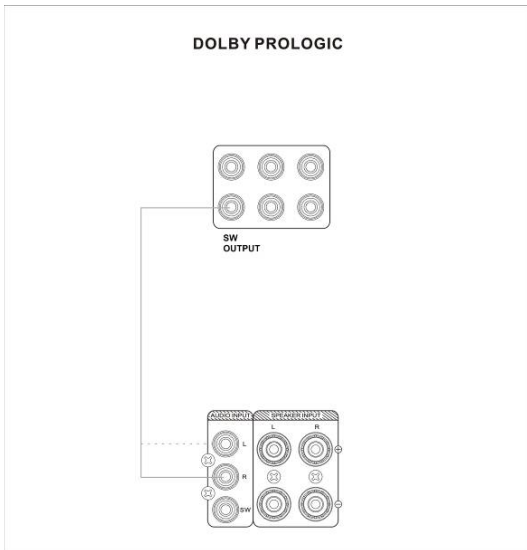


**Figure 3 Connection to a Home Theatre receiver**

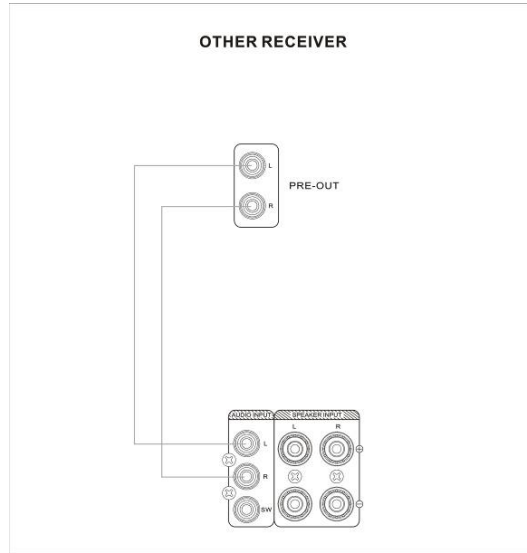
The connection on on Figure 3 should be used for connection to all Vifa Receivers and most Dolby Digital and dts receivers.

**❶ and ❷. R+L: Low level input:**

This input is for connection to a Pre-out low level output from a preamplifier with no low-pass filtered subwoofer output. The two channels R+L is mixed together to a mono signal inside the subwoofer. Typically older Dolby Pro Logic receivers should be connected using this input. Either one of the R or L inputs can be used alone. The crossover adjustment knob is engaged using this input.



**Figure 4 Connection to a Dolby prologic receiver**



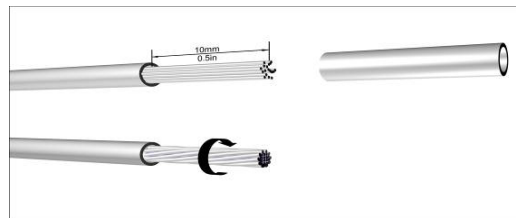
**Figure 5 Connection to pre-out**

**❹ and ❺. R+L: High level input:**

This input is provided for connection from the speaker output terminals of an amplifier or receiver with no dedicated low level subwoofer or LFE output. The crossover adjustment knob is engaged using this input. This input uses the speaker terminals and therefore it should be connected using speaker cables. If you do not have a dedicated SW output or pre-out you can use the high level inputs connected to the speaker outputs on your amplifier.

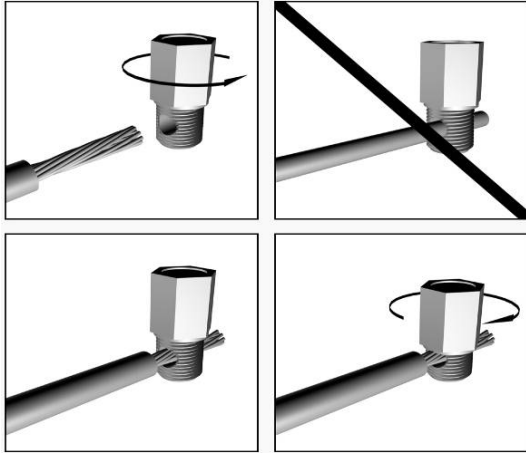
***Before connecting the speaker cables turn off the main power to the subwoofer and amplifier or receiver!***

Start by stripping off the insulation on the wire and twist the treads before inserting the wire in to the terminal.



**Figure 6 Stripping off insulation**

Be careful not to insert the insulated part of the wire in to the terminal because this will cause a bad connection.

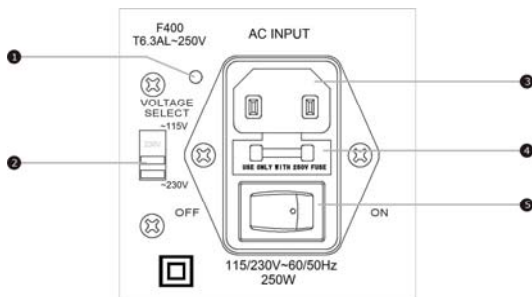


**Figure 7** Correct connection of speaker wire

It is very important for the sound image and bass reproduction that the positive (+) terminal on your amplifier is connected to the positive (+) terminal on the high level input and likewise that the negative (-) terminal on the amplifier is connected to the negative (-) terminal on the high level input. This ensures correct phase. It is recommended to connect both input terminals of the subwoofer to the receiver output.

## Mains power switch and standby light

After making the input signal connection to your subwoofer you are now ready to power up.



**Figure 8** AC input

- ❶ Standby/power light
- ❷ Mains voltage selector
- ❸ AC input
- ❹ Fuse
- ❺ Mains power on off

The AC input should be connected to the mains wall plug through the supplied cable.

When the mains power switch is ON the subwoofer will automatically detect a signal on the input and power up. The Standby/power light will change from red to green. After approximately 15 minutes with no signal on the input terminals the sub returns

to standby indicated by a red light. It is recommended to switch off the subwoofer main power if it is not going to be used for prolonged periods of time.

The mains supply voltage can be selected on the voltage selector. Unless you move to a country with a different mains supply voltage you should not care about this selector.

The AC-power fuse is provided for maximum protection and should only be replaced with a type of same rating.

## Surround sound Bass Management

The ideal surround speaker system is a full range speaker for each channel including the centre channel and surround channels. In a normal living room environment, big and bulky full range speakers are not practical and therefore the idea of low frequency or bass management was invented. By redirecting the bass sound intended for each speaker channel to the main front speakers or to the dedicated subwoofer, it is possible to reduce the size of the centre and surround speakers to a more suitable size.

In most receivers it is possible to select small or large for each speaker in the system. The subwoofer can also be switched on or off.

Note: Remember to switch the subwoofer “on” in the receiver menu system.

We recommend the following settings of your receiver bass management system. Please refer to the receiver manual for instruction on how to change the speaker settings.

### Enabling the subwoofer in the receiver:

*This setting must be chosen in the receiver menu system to enable the subwoofer signal to the subwoofer.*

Front speaker:	“Large or small“
Centre speaker:	“Small or large“
Surround speaker:	“Small or large“
Subwoofer:	“ON“

Regarding the large or small setting of the front speakers, the center speaker and the surround speakers please refer to the speaker manual.

All Vifa receivers feature a test signal that can circle around in all speakers. This signal is a convenient way to calibrate the output of the subwoofer and all speakers. Please refer to the receiver manual for using this test signal.

## Controls

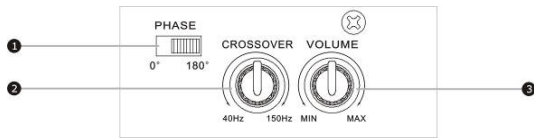


Figure 9 Controls on the back panel

### 1 Phase:

The switch can select the Phase between 0 and 180 degrees.

### 2 Crossover:

Fine tune the crossover frequency for the sub. Only used for the normal inputs L+R and the high level inputs

### 3 Volume:

Used to adjust the volume or level of the subwoofer.

## Volume, phase and crossover point setting of the subwoofer

Phase, crossover point and volume settings interact and we recommend setting the system in the following order: Please notice that when using a dedicated SW output terminal from a Dolby Digital or DTS capable receiver the SW input on the subwoofer should be used and NO adjustment of crossover point is needed.

1. Adjust crossover point (only needed when using L+R input or High level input)
2. Adjust phase
3. Adjust volume

## Crossover adjustment

The crossover adjustment knob has no function when using the SW input because the signal processing is handled by the receiver. If you are using this input connected to a SW output, then you can skip this section.

However if you are using the R+L input or the R+L high level inputs you must adjust the crossover in the following way:

The crossover adjustment range is from 40 Hz to 150 Hz.

- The 40 Hz setting is recommended to be used in systems with large front speakers that are capable of producing high quality bass.
- The 150 Hz setting is recommended for small satellite speakers that can not produce bass by them selves.
- A position half way on the scale can be used when bookshelf speakers with some

bass output capability are used as main speakers.

We recommend setting of the crossover based on the above guidelines and fine-tune by listening for the best and smoothest bass response from the whole system.

## Phase switch setting

To achieve the best integration between the subwoofer, room and the main speakers in the system, the phase can be switched between 0 and 180 degrees. There is no “correct” setting of the phase because the position of the subwoofer in the room, the distance to the main speakers and the listener position influence the result.

A general guideline for setting the phase is that if the subwoofers are placed closer to the listening position than the main speakers, the phase should be inverted 180 degrees. If the sub is placed close to – or further away from the main speakers, the phase should be at 0 degrees.

The best setting is when the subwoofer blends in to the system without attracting attention during normal playback. Different configurations of the system calls for different settings, so only through listening to several sound tracks, the optimal setting can be found. The final judge should be your ears.

## Volume setting

The volume of the subwoofer can be adjusted using the volume knob on the rear panel. We recommend that the volume knob is adjusted to roughly achieve the desired level of the subwoofer. The fine tuning of the subwoofer volume can conveniently be adjusted in the receiver menu system from the listening position. Please consult your receiver manual for setting the subwoofer level.

## Cleaning

A soft damp cloth can be used to wipe off the surface effectively.

Please do not use any detergent or strong cleaning agents to clean your speakers.

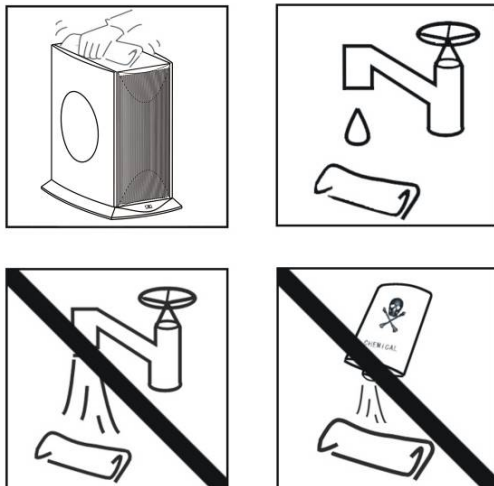


Figure 10 Proper cleaning

## Warranty

All Vifa subwoofers are covered by a 3 year limited warranty from the date of purchase. Please keep the receipt from your dealer as documentation and contact your dealer for warranty inquiries.

The warranty covers manufacturing and material defects, except:

- Defects caused by misuse or improper installation
- Defects caused by accidents, stroke of lightning, or other force majeure events.
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- Defects caused by the use of non-original spare parts.
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Transportation costs for servicing are not covered by the Warranty.

Vifa will only be responsible of repairing or replacing defective parts and is not responsible for indirect losses or damages arising from the use of the products. A replacement cannot exceed the value of the product under warranty.

## Technical specifications

### Amplifier

Power  
(RMS 0,7% THD)

150 W Class H amplifier

Crossover point

45- 150 Hz

Frequency response

35 Hz to crossover point

Input sensitivity low level SW input

250 mV

### Power supply

115/230V ~ 60/50Hz  
250W

### Physical

Dimensions (WxDxH)

420×222×360mm

Weight

17 kg

## Troubleshooting

<b>Error</b>	<b>Possible reason</b>	<b>Possible solution</b>
No sound from sub.	<p>No power to subwoofer</p> <p>No signal from receiver to sub</p> <p>Subwoofer not set to ON in receiver menu system</p>	<p>Check power cable and that the standby light is green.</p> <p>Check the mains power switch is set to "1"</p> <p>Check your connections</p> <p>Check the setting of subwoofer in receiver menu</p>
Subwoofer level very low	<p>Volume control set to min.</p> <p>Output from receiver too low.</p>	<p>Increase the volume level.</p> <p>Check if the subwoofer level can be increased in the receiver menu system.</p>
Subwoofer sound distorted	Possible bad adjustment between subwoofer output of receiver and volume setting on sub causing the receiver or sub input circuit to overload.	Please try to reduce the subwoofer level in the receiver menu system and increase the volume setting on the back panel of the subwoofer