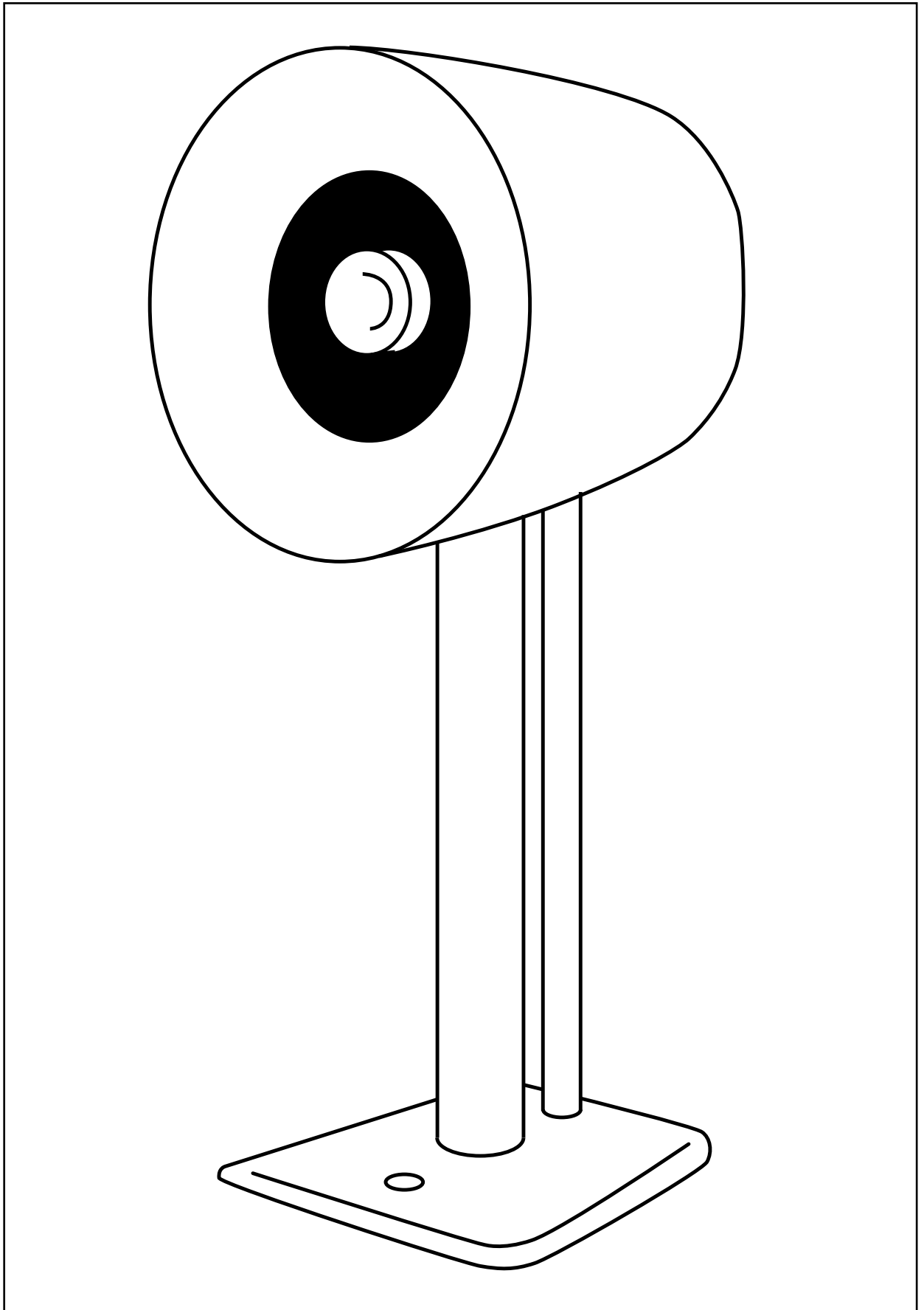


SOLO



avantgarde
ACOUSTIC



SOLO



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SOLO



SAFETY INFORMATION



CAUTION

- It is intended to alert the user of the presence of uninsulated „dangerous voltage“ within the products enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.
- To prevent fire, shock or damage, do not expose the components to rain or moisture.
- To avoid electrical shock, do not open the cabinet of the components. Refer servicing to qualified personnel only.
- Excessive sound pressure levels might cause serious damage to your health. Do not turn the speaker system too loud.

PRECAUTIONS

ON SAFETY

- Should any solid object or liquid fall into the cabinet of the components, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the components system from the wall outlet if they are not to be used for an extended period of time. To disconnect the power cord, pull it out by the plug. Do not pull the cord itself. Never touch the plugs with wet hands.
- Only let qualified personnel repair or reassemble the components of the system.

ON INSTALLATION

- The spherical horns are not constructed to support the weight of the speakers. Do not move or carry the speakers by holding to its horns. To avoid damaging the finish, never use alcohol, paint thinner or chemicals to clean the components.
- Good air circulation is essential to prevent internal heat build-up in the components. Place units in a location with sufficient air circulation.
- Do not install the speakers in a location near heat sources such as radiators, or in a place subject to direct sunlight, excessive dust, or mechanical vibration.
- Place the components of the system on a flat solid surface. Do not install the units in inclined position.
- Connect everything securely. Always insert the plugs fully into the jacks. A loose connection may cause hum pickup and can damage the system. To prevent malfunction and short circuits, use only high quality cables with self tightening banana speaker and RCA or XLR plugs.
- Read this operators manual thoroughly before operating the speaker system.

OPERATING VOLTAGE

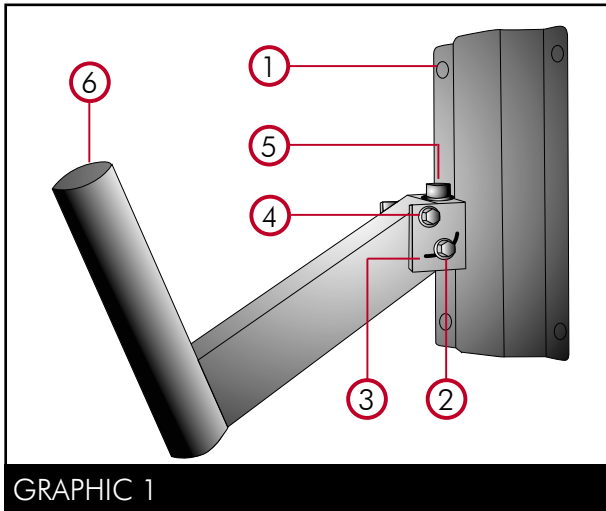
Before connecting the speaker system to the power source, check that the operating voltage of the unit is the same as the local power line voltage.

Europe	230 V AC, 50 Hz
United Kingdom	240 V AC, 50 Hz
USA, Canada	120 V AC, 60 Hz
Other countries	100, 120, 220 or 240 V AC, 50/60 Hz

SOLO



SPEAKER ASSEMBLY



GRAPHIC 1

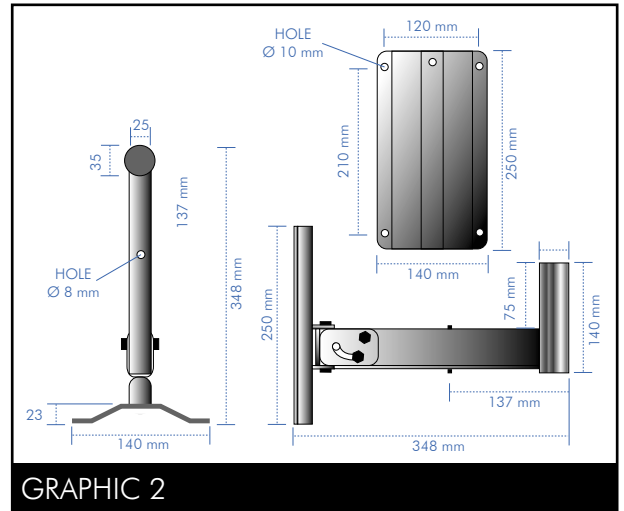
UNPACKING THE SPEAKER SYSTEM

1. **IMPORTANT**
Please keep in mind that the SOLO is very heavy and has a weight of 65 lbs (30 kg).
 - Get some help to unpack the speaker carefully.
2. Completely open the packing box at the top. Carefully tip over the box upside down, so the base of the box should be facing up.
3. Now you can easily lift the box up and remove the packing inserts which protect the system.
4. Remove the plastic sack.
5. **IMPORTANT**
Before lifting the speaker, make sure that the ground is covered with a soft blanket, so the speaker does not get scratched or damaged.

GENERAL

For optimal placement of the speaker Avantgarde Acoustic™ offers as an option a stable wall mount bracket or alternatively a beautiful speaker stand. Please keep in mind that the SOLO is very heavy and has a weight of approx. 65 lbs (30 kg).

- Get some help when lifting the speaker!



GRAPHIC 2

INSTALLATION OF WALL MOUNT BRACKET

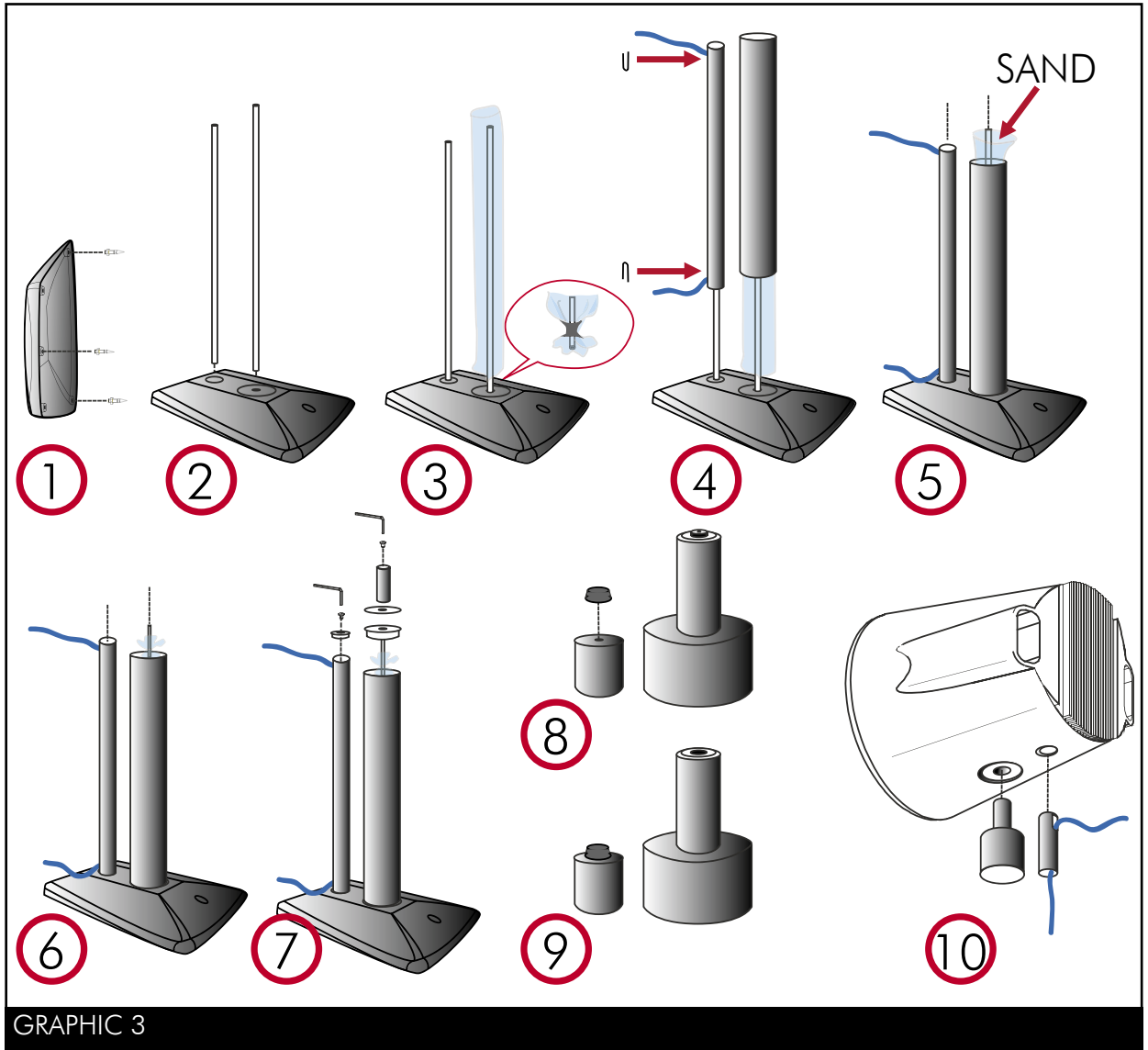
(See graphic 1)

1. **IMPORTANT**
Make sure that the wall is strong enough to hold the full weight of the speaker (65 lbs /30 kg). Always use all 4 screws to install the wall mount ①. The minimum size of the screws should be M8 x 60 mm. Use the appropriate dowels depending on the structure/material of your wall.
2. Pre-position the wall mounts vertically and horizontally before sliding the speaker onto the bolt ⑥.
3. To position the speaker system, the wall mount can be twisted and angled. To adjust the horizontal direction untightening screw ⑤, twist the wall mount bracket and then re-tighten the screw ⑤.
4. Untighten the screws ② and ④ with the appropriate tools and adjust the inclination of the wall mount. Tighten the screws ② and ④ firmly before sliding the speaker on top.
 - If it is required to readjust the position, always remove the speaker before!

SOLO



SPEAKER ASSEMBLY



INSTALLATION OF SPEAKER STAND

1. Please refer to the instructions in graphic 3 to assemble the speaker stand.
 2. Place the SOLO on top of the bolt (big front tube of the speaker stand) and let the speaker carefully slide down till it fully rests on the speaker stand.
 3. Please note that the speaker will sit very tight. Some pressure might be required for sliding the speaker down to the bolt.
- Tips and tricks to determine the optimal position of the speakers can be found in the respective chapter of this manual.

SOLO



SYSTEM INSTALLATION

GENERAL PRECAUTIONS

IMPORTANT

The power to all components must be switched OFF or they must be disconnected from the household AC plug before making any Audio connections.

To prevent misfunction/defects, do not operate components with open input/output terminals.

Before making any AC power connections, all components have to be properly installed and connected.

CAUTION

• Control the polarity! Never mix up + and —. Wrong polarity will deteriorate the sound quality and can damage amplifier and the active power module of the speaker.

• Do not short circuit the +/— poles of the speaker cables.

• Control the polarity of the XLR cables:

PIN 1 = GROUND

PIN 2 = SIGNAL (in phase)

PIN 3 = SIGNAL (inverted)

SOLO



SYSTEM INSTALLATION

CONNECTION TO INTEGRATED AMPLIFIERS

(See graphic 4)

The SOLO can be directly driven by SPEAKER LEVEL signals from the power output terminals of integrated amplifiers and power amplifiers.

1. Connect the SPEAKER OUTPUT terminals of your power amplifier or integrated amplifier ❶ with the SOLO INPUT terminal ❷. Use a speaker cable which is configured with a XLR plug (male) ❹. The XLR plug ❹ should be configured:

PIN 1 = GROUND
 PIN 2 = SIGNAL (in phase)
 PIN 3 = NOT used
 (alternatively: bridge PIN 1 and PIN 3).

2. The SOLO has one female XLR-INPUT ❷. If you use standard speaker cables with 4mm connectors or spades, Avantgarde Acoustic™ offers as an option XLR-to-SPEAKER TERMINAL adapters ❸. This adapter is a small box with a 1,5m cable with XLR plug which fit into the SOLO INPUT ❷. On its other side it has 2 high quality WBT SPEAKER TERMINALS to fit your speaker cable. This way any speaker cable can be directly used with the SOLO.

3. Only now, connect the AC power cords of the components to a household AC outlet and turn on the speaker.

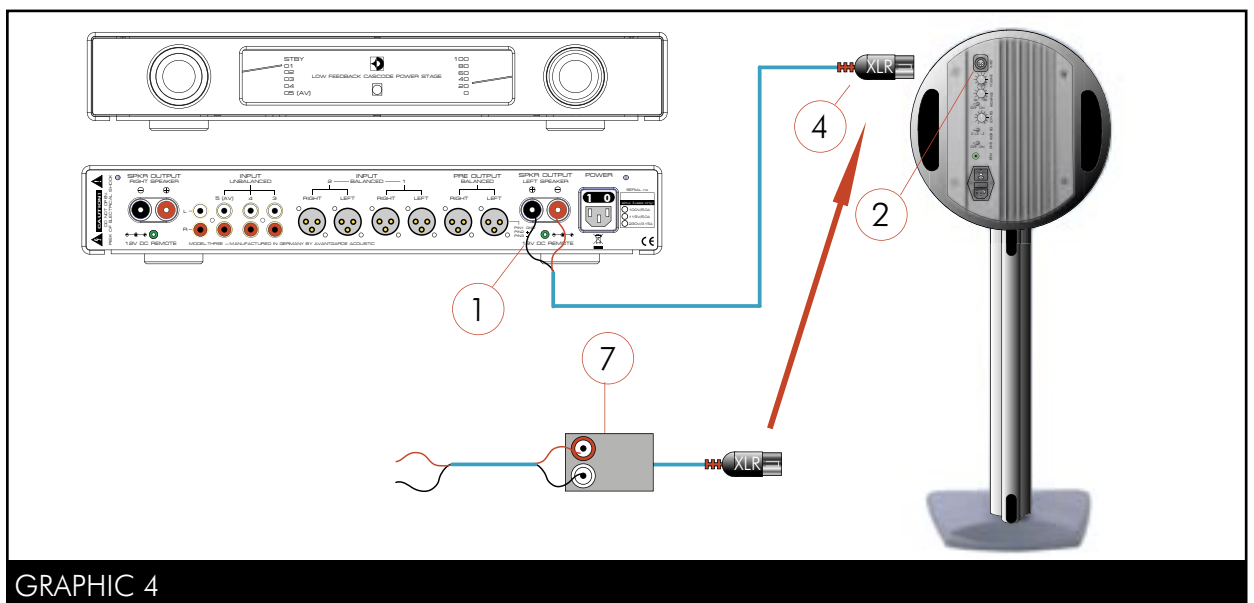
CAUTION

⚠ Never turn on the components with open inputs!

ATTENTION

Should you use a so called "Digital Power Amp" (e.g. in PWM mode) it is necessary to protect the SOLO with a parallel resistor (e.g. 8.2 Ohms/10 Watts) between power amp and SOLO!

⚠ It is strongly advised that you contact you dealer, national distributor or Avantgarde Acoustic for further information!



GRAPHIC 4

SOLO



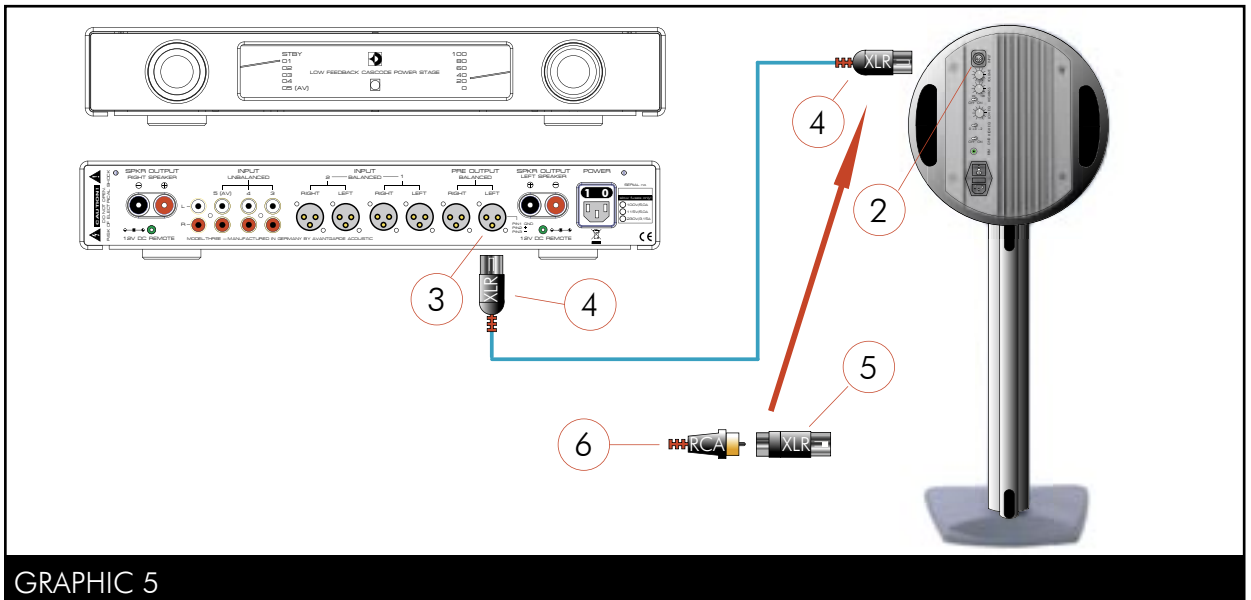
CONNECTION TO PREAMPLIFIERS (See graphic 5 and 6)

The SOLO can as well be directly driven by LINE LEVEL signals preamplifiers, surround processors, mixing consoles etc. (via RCA ⑥ or XLR connectors).

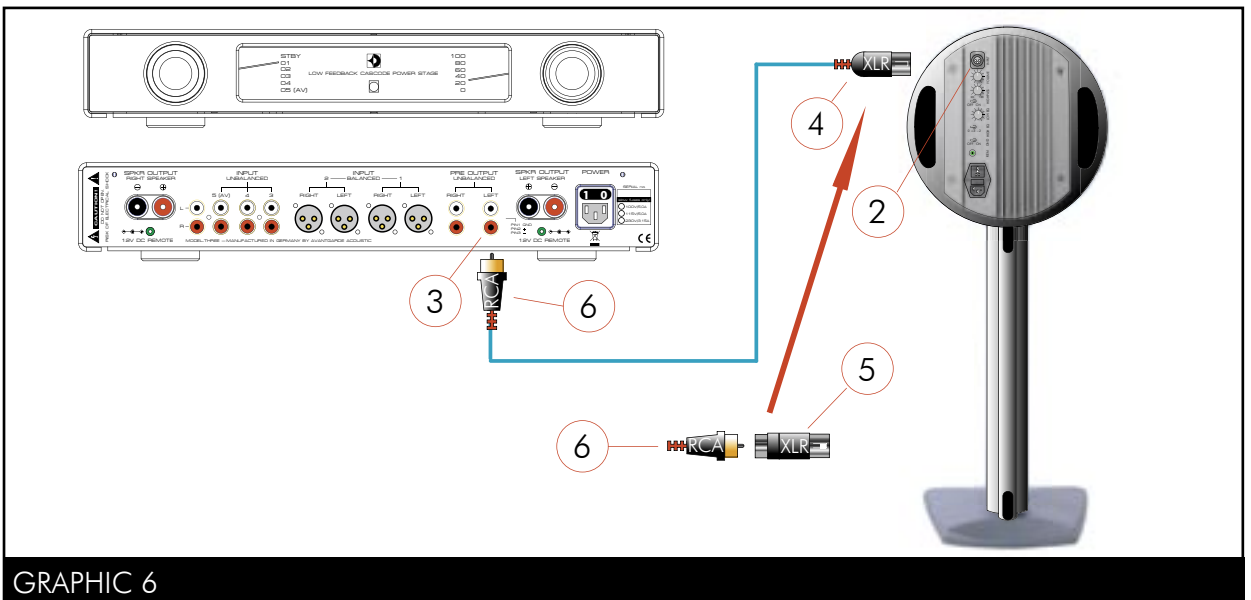
The SOLO power module has one female XLR-INPUT ② to directly connect balanced preamplifier signals via the respective XLR connector.

Additional the system is shipped with an XLR-to-RCA adapter ⑤. This way unbalanced sources can be easily connected.

1. Connect the PRE OUT (or REAR OUT, CENTER OUT) OUTPUT terminals of your preamplifier ③ with the SOLO INPUT terminal ②. The XLR plug ④ should be configured:
PIN 1 = GROUND
PIN 2 = SIGNAL (in phase)
PIN 3 = NOT used
 2. Only now, connect the AC power cords of the components to a household AC outlet and turn on the speaker.
- Tips and tricks to determine the optimal position of the speakers can be found in the respective chapter in this manual.



GRAPHIC 5



GRAPHIC 6

SOLO



OPERATION

GENERAL

Note, that Avantgarde Acoustic™ horn systems are extremely sensitive compared to “conventional” speaker systems and consequently not only music but also hum noises caused by low signal-to-noise ratios of the used electronic components (ex. amplifiers) are reproduced louder and might become audible. Contact your dealer and have your audio electronics checked.

VOLUME CONTROL

(See graphic 7)

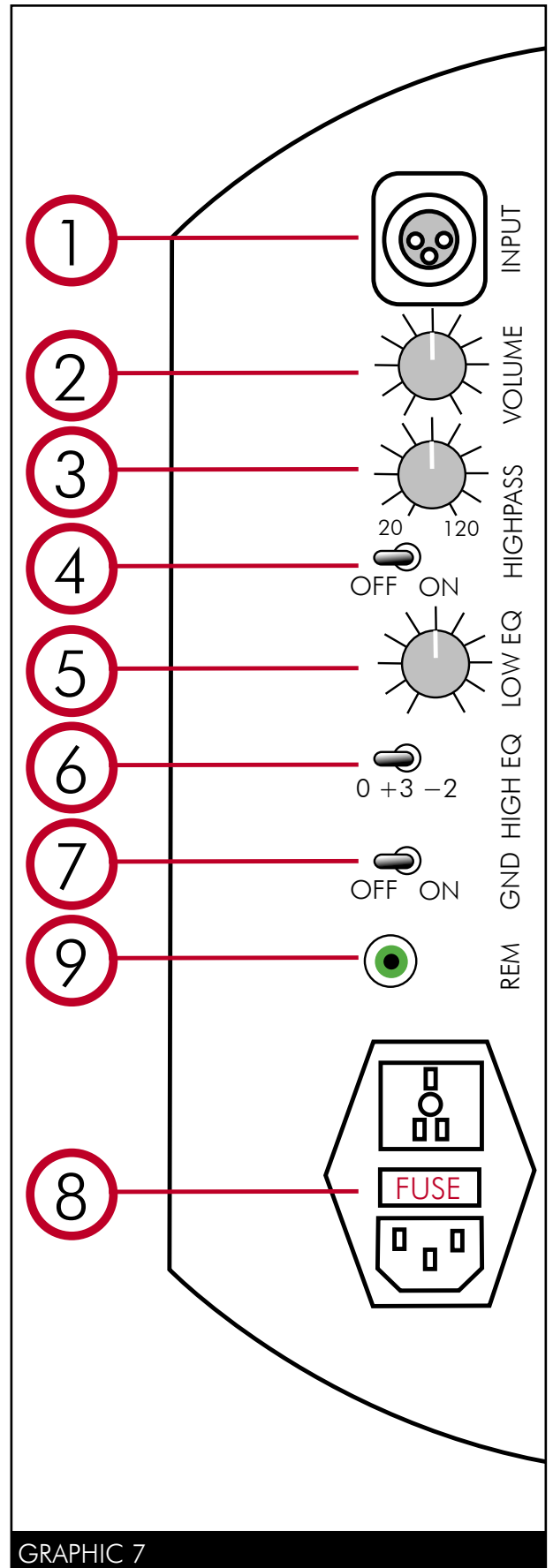
The volume of the speaker and its input sensitivity can be controlled within a wide range. This way it is easily possible to adjust the speaker to different signal strength of preamplifiers, surround processors, mixing consoles and power amplifiers. Adjust the output level using the VOLUME attenuator ② of the speaker power amplifier module. A clockwise rotation will increase the level, a counter-clockwise rotation will decrease the level.

To determine the most practical setting of the VOLUME ②:

1. Counter-clockwise rotate the VOLUME control ② of the SOLO to the 0-position.
2. Turn your amplifier and the speakers ③ ON.
3. Turn the VOLUME control of your AMPLIFIER up to a middle position. E.g. a setting which normally gives you a medium sound pressure level (with your old speakers).
4. Turn the VOLUME ② of the SOLO up till you hear the expected medium sound pressure level.

The same procedure is applicable for surround processors, mixing consoles and preamplifiers.

➤ Please see as well the chapter on the factory settings for all SOLO controls.



GRAPHIC 7

SOLO



OPERATION

HIGHPASS FILTER

(See graphic 7)

The HIGHPASS FILTER allows you to limit the bass response of the speaker. The system is normally operated with the HIGHPASS-SWITCH ④ in the OFF-position and the HIGHPASS FILTER attenuator ③ in the 20 Hz position. In this case the speaker operates in FULL RANGE-mode.

In installations with critical room resonances, when the SOLO is operated with additional subwoofers, with CDs containing over-enhanced bass-signals and with some LPs it might be useful to operate the system with activated subsonic-filter.

SWITCH the HIGHPASS-SWITCH ④ to its ON-position and turn the HIGHPASS FILTER attenuator ③ clockwise. Use bigger steps at the beginning (3-4 clicks) and fine tune the system later (click-by-click). This will cut (filter) low frequencies below 25 Hz - 120 Hz.

- When using additional subwoofers, an 80hz setting of the HIGHPASS FILTER attenuator ③ (12 o'clock position) should in general give good results. Critical room resonances can mostly be reduced by setting the HIGHPASS FILTER attenuator ③ to 50hz (10 o'clock position).

- If the system is used at very loud listening levels (volume), the HIGH PASS filter can be used to reduce mechanical strain of the driver and thus significantly increase the possible max. sound pressure level. This way the subwoofer systems will not be stressed with unwanted subsonic frequencies and gains dynamic headroom.

- The HIGHPASS-FILTER can be completely bridged by setting the HIGHPASS-SWITCH ④ to its OFF-position. This will bypass the signal on the circuit board.

LOW EQ

(See graphic 7)

Depending on the placement of the speaker and the acoustics of your listening room, the LOW EQ attenuator ⑤ allows for a simple adjustment of the bass response and sound characteristics of the SOLO. This way it is easy to linearize the low end of your system.

If the speaker is placed close to the rear walls a counter-clockwise rotation of the LOW EQ attenuator ⑤ will reduce the bass response. A clockwise rotation will increase the bass level.

- The LOW EQ attenuator ⑤ is a very nice tool to fine tune your stereo system. You can simply add "body" or make the speaker sound more analytic.

- Please see as well the system set up section in this manual

HIGH EQ

(See graphic 7)

To optimize the "clarity" of your system in different set ups, the HIGH-EQ switch ⑥ allows you to simply fine tune the treble response of the SOLO:

- In its -2dB position, the treble response will be slightly reduced, for example in rooms with very little acoustical absorption (few curtains, furniture etc.) and with treble heavy recordings.
- The +3dB position allows you to compensate the loss in high frequencies when the speaker is installed behind a perforated cinema screen in your home theatre system.
- The treble response is flat (linear) when the HIGH EQ ⑥ is set to the 0dB position.

SOLO



OPERATION

POWER ON/OFF SWITCH

(See graphic 7)

The SOLO has a 3-position power switch **8**: POSITION I (= permanent ON), POSITION II (= remote ON) and middle POSITION 0 (= permanent OFF).

- a) In POSITION I (= ON) the SOLO will be permanently ON. The SOLO has been designed for permanent use. Due to sonic advantages we recommend to leave it always switched ON. Power consumption is approx. 15 Watts when not in use.
 - b) In POSITION II (= REMOTE) the operation mode of the SOLO is remotely triggered. Connect the respective remote trigger cable (12 V= switching voltage) of your electronics with the REMOTE socket **9**. As soon as your electronics (surround receiver, multi room amplifier etc.) is turned ON/OFF, the SOLO will automatically switch ON/OFF. For details on wiring please refer to the manual of your electronics as well.
-
- c) In POSITION 0, the SOLO is turned to permanent OFF. If you prefer to switch the subwoofers OFF after listening you can either use the power-switch on the back or an external power-switch. Switching-noises when turning the speaker OFF are normal and present no danger to the SOLO drivers or amplifier. If your HiFi equipment is not in use over a longer period turn the system OFF.

GROUND SWITCH

(See graphic 7)

Missing or faulty earth of the mains system might cause audible hum noise. In this case the SOLO earthing contact can be deactivated by switching the GND-switch **7** to OFF position (position ON = factory setting). Just simply check which position is best.

SOLO



FACTORY SETTINGS

The factory settings are recommendations for the first installation of your system. The markings on the drawings below indicate the position of each switch and control during the final testings at the factory. These settings have been individually determined for your system prior to shipment. The markings are set to a linear frequency response under optimal conditions.

IMPORTANT

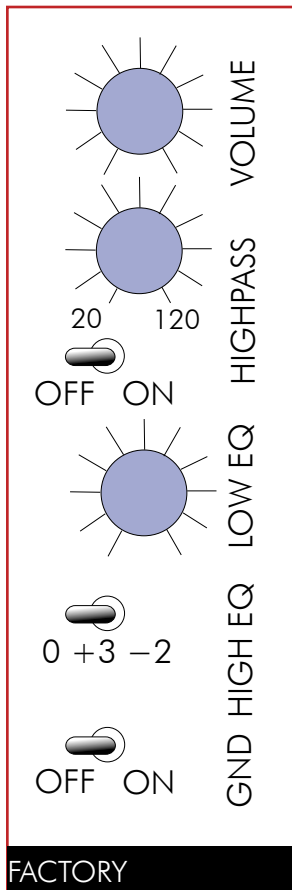
Please check that all controls and switches are set to the factory settings indicated on the backside of the warranty card!

Please note that the factory settings are recommendations only and should be fine adjusted according to the specific requirements of your system and your operating environment. To file the best settings for your system, you can mark the respective positions in the empty drawings below CONFIG 1 – 3

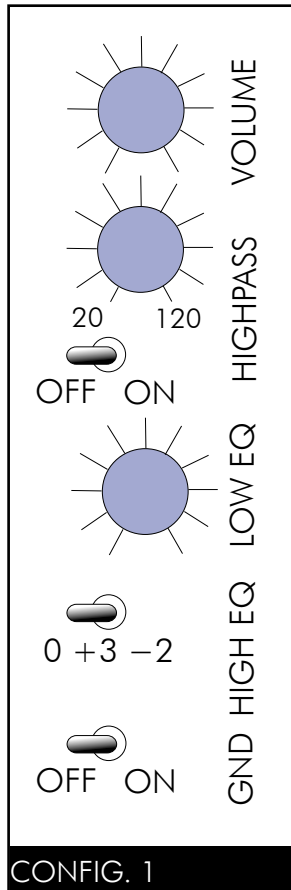
Turn your system on and listen to music. We recommend to switch on the components in the following order:

1. SOURCES (CD-Player, Tuner, Cassette etc.)
2. PRE-AMPLIFIER or INTEGRATED-AMPLIFIER
3. POWER-AMPLIFIER (s)
4. SOLO speaker
(Exception: „REMOTE“ activated)

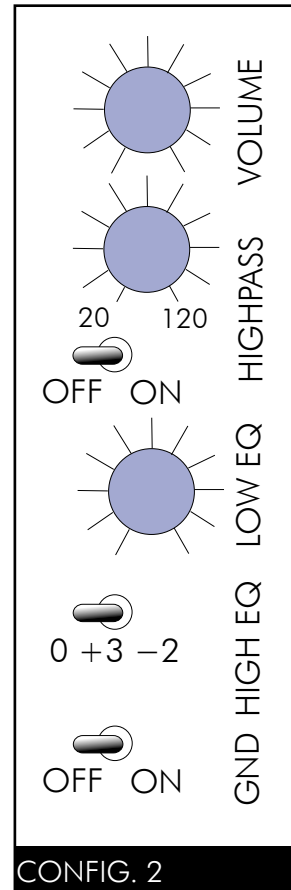
Tips and tricks to determine the optimal position of the controls can be found in the respective chapter of this manual.



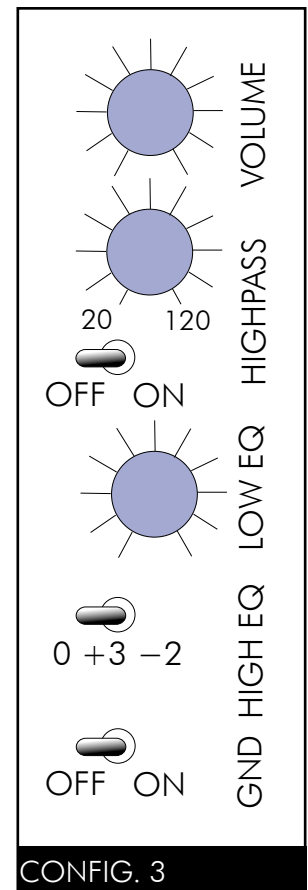
FACTORY



CONFIG. 1



CONFIG. 2



CONFIG. 3

SOLO

SYSTEM SET UP

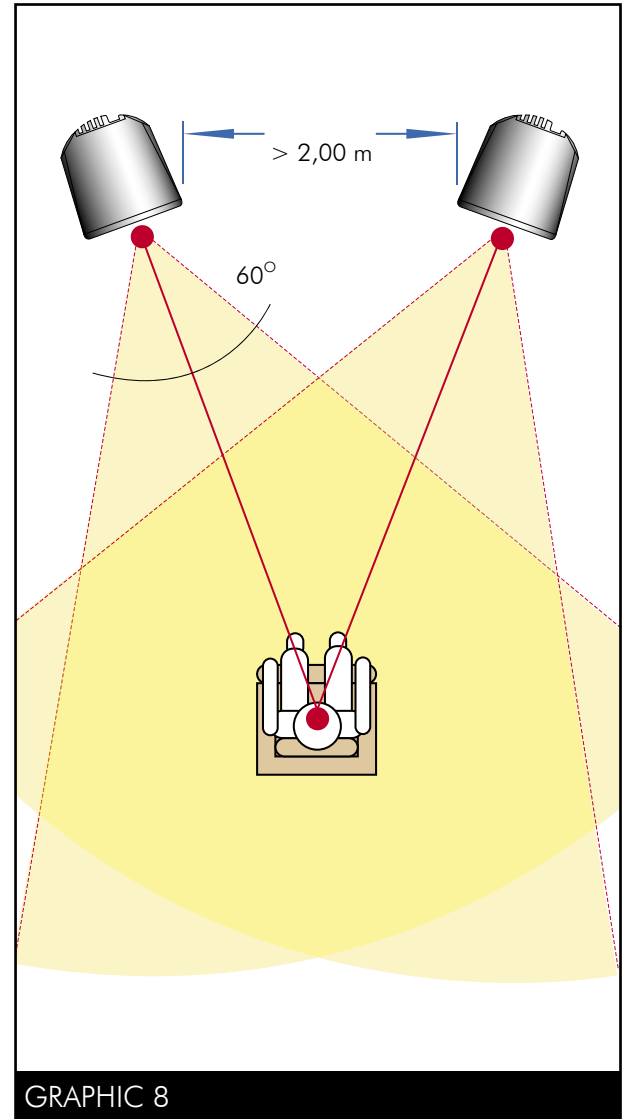
APPLICATIONS

With its built-in power amplifier and control unit, the SOLO is very flexible and can be adjusted to a variety of installations. Besides the standard operation in stereo mode, it allows for the following configurations:

- In professional public address applications like discos, bars, bands etc. The SPL capabilities of the SOLO offers dynamic headroom.
- In centrally monitored multiroom-High End-Installations.
- In demanding High-End Home Cinema Systems with 5 to 7 identical surround speakers, plus additional subwoofer (SUB225CTRL, SUB230CTRL or BASSHORN). The SOLO is compatible to all surround formats.
- Upgrade of an existing Stereo configuration to a High-End Home Cinema Systems. The SOLO ideally matches the speed of our big horn systems and is an ideal match to the Avantgarde Acoustic™ UNO/DUO/TRIO²-Series.
- In professional studio monitor applications. With its build-in controls it can be easily fine tuned and adapted to the most demanding listening requirements.

GENERAL

The SOLO can be positioned directly in front of back or side walls. The speakers (both or only one speaker!) can as well be placed close into corners. In this case the speakers need to be toed-in and the subwoofer level needs to be adjusted/reduced with the LOW EQ attenuator 5 (see GRAPHIC 7). The controlled dispersion of our spherical horns will minimize unwanted reflections from back and side walls.



ROOM PLACEMENT IN STEREO MODE

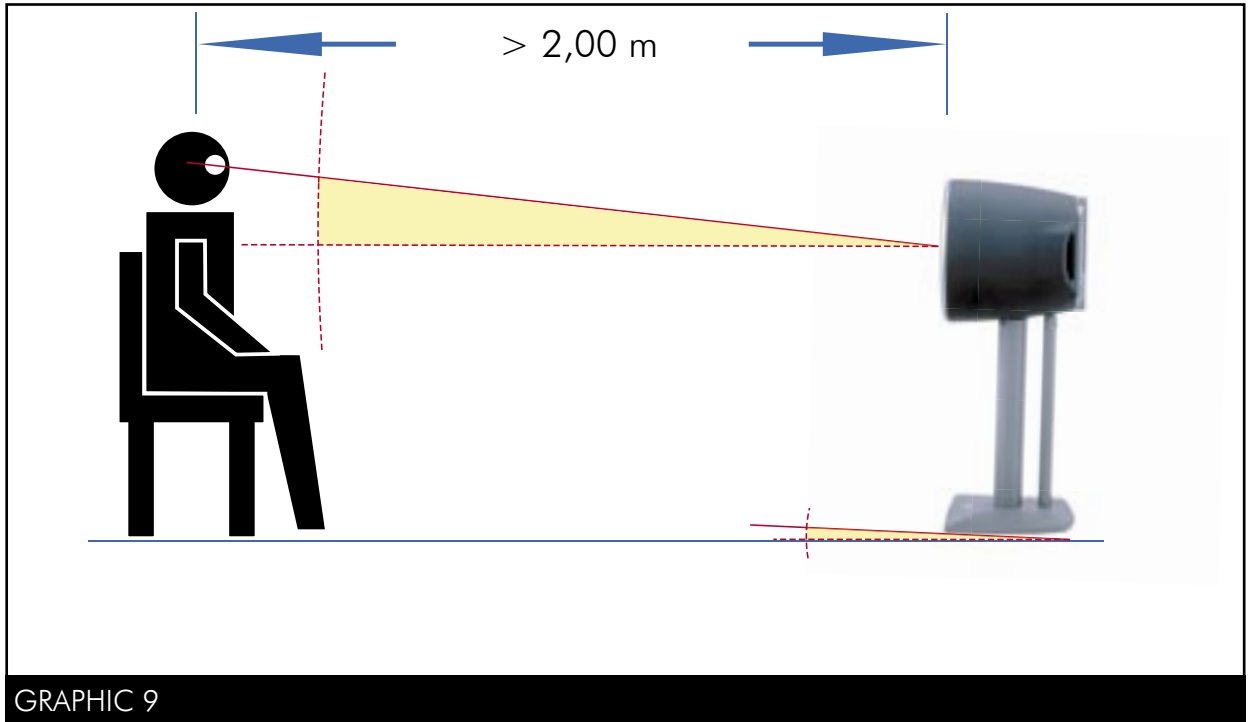
(See graphic 8)

Choose a position of the speakers in your listening room. Both speakers and your listening seat should form an approx. equilateral triangle. Ideally each side of the triangle should be approx. 10 feet (3,0m).

- Please note that this distance can be significantly increased or decreased with no problem, if the speakers are toed-in correctly.

SOLO

SYSTEM SET UP



TOE-IN / INCLINATION IN STEREO MODE

(See graphic 9)

The SOLO should be toed-in at first, so the speakers are pointing directly to the listening position.

If the sound is too "direct" and too "forward sounding" for your personal taste, you can "toe-out" the speakers in small steps. In its extreme you can even set up the speakers parallel to the back wall. In this case we recommend a minimum distance to the side walls of 5 feet (1,5m) to avoid reflections from the side walls.

With the metal-base stand its is also possible to tilt the speaker. So if you have a relatively high listening position the speaker can be tilted backwards by adjusting the feet or spikes.

Test the RLX placement! In this case the focus of the tweeters are pointing to a position 1.5 feet (50cm) in front of your actual listening seat. Voices and solo-instruments will be nicely separated and appear to come from a deeper soundstage. In this case the stereo area is more focussed to the listening position.

- When you change the position/angle of the speakers, you should always first mark the original position of the speaker on the floor (e.g. with tape), so you can easily return to the previous position.

SOLO

SYSTEM SET UP

ROOM PLACEMENT IN HOME THEATRE MODE

(See graphic 10)

Both REAR CHANNEL speakers should be positioned behind the listening position. Ideally these speakers should be mounted relatively high. If possible use the wall mount bracket, but the speaker stand will do as well fine.

The CENTER-CHANNEL should be centered between the FRONT LEFT/RIGHT speakers. Ideally all 3 front channel speakers are installed at the same height. If not possible, use a lower position for the CENTER CHANNEL and incline it up.

The FRONT LEFT/RIGHT speakers should be positioned like in standard 2-way Stereo applications.

TOE-IN / INCLINATION IN HOME THEATRE

(See graphic 10)

The SOLO should be toed-in and inclined (wall mount) at first, so the speakers are pointing directly to the listening position.

- ☛ If the sound is too “direct” and too focused to the listening position, you can vertically/horizontally “toe-out” and change the inclination angle (only wall mount!) of the speakers in small steps.

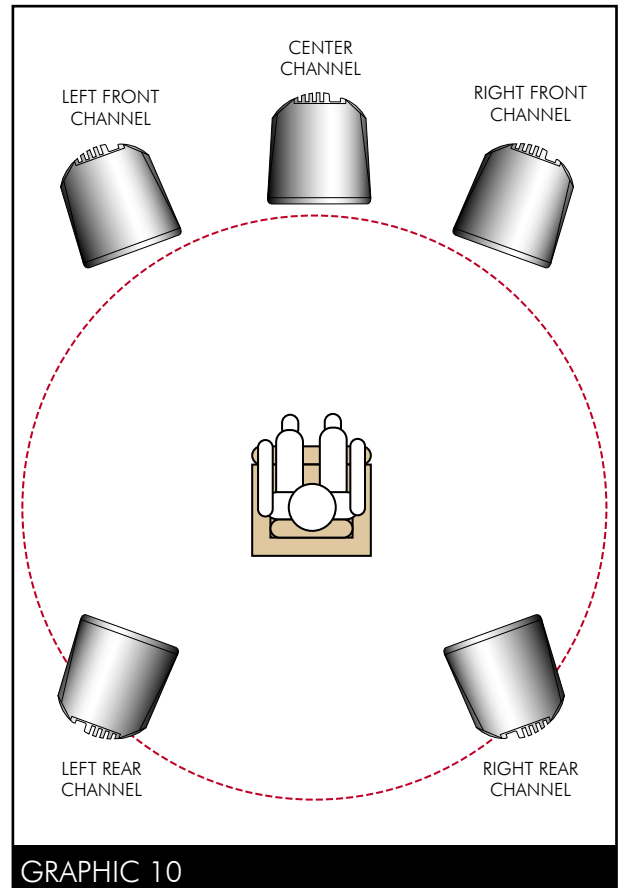
- ☛ The CENTER channel should always be directly focused to the middle listening position.

POWER MODULE SETTINGS

(See graphic 10)

The LOW EQ attenuator **5** can be carefully used as a tool to adjust the “tonal balance” of the system.

- ☛ If the LOW EQ attenuator **5** is purposely set to a higher setting, the speaker will sound “warmer”, with a richer “body” and “substance” in its tonal characteristics.



- ☛ But be cautious: if the setting is too high, the midrange will lose part of its horn-typical transparency and resolution.

- ☛ If the LOW EQ attenuator **5** is purposely set to a lower setting, the tonal balance of the system will shift to a more horn-typical “dynamic” and “punchy” sound. But again be cautious: if it is set too low, the system will lose volume/substance and may sound “thin”.

SOLO



SYSTEM SET UP

BURN-IN TIME

The speakers usually need at least 40 hrs. of running-in. During this period sound quality will almost improve "minute by minute". After this time it may be necessary to check and correct the system set-up (positioning and amplifier-settings).

Please leave the SOLOs continuously ON during this run-in period. In total, changes will be noticeable usually during the first 80-100 hrs. Afterwards the speaker can be considered run-in and is ready for experiments with fine-tuning equipment.

CABLES

Due to the high efficiency of hornspeakers there is a very low signal-level running through the speaker cables when using a power amplifier or integrated amplifier signal. In our experience speaker cables which are shielded or are constructed to minimize interaction of the signal with internal or external magnetic fields are always a reasonable choice.

If the SOLO is connected via the RCA signal of a preamplifier we recommend using a shielded high quality cable. Always check the recommended electrical flow direction of the cable before connecting it!

GENERAL ADVISE

Personal experiments are always better than theoretical studies! Please ask your dealer for more advice and for home testing. The same is recommended if you want to change the speakers mains cable.

CLEANING OF HORNS

- We recommend to regularly clean the white or metallic-coated horns with a dry soft fabric (duster) or a Rouge-brush.
- To remove finger prints and dirty spots we recommend the use of glass detergent.
- To remove small scratches we recommend the use of automotive waxes and polishing compounds for cars. Please proceed carefully and strictly follow the cleaning instructions of the manufacturer.

IMPORTANT

- Do not touch the membranes while cleaning the horns!
- Avoid scratching the horns with dirty fabrics and never use „aggressive“ detergents or abrasives!
- Never use automotive waxes and polishing components on „silky sheen“-coated surfaces (enclosure of SOLO)!

CLEANING OF NEXTEL COATED SURFACES

- To clean the Nextel coated surfaces of the enclosure only use a sponge or foam! Dust also can be carefully removed with a vacuum cleaner and a duster brush.

IMPORTANT

- Never use normal soft fabrics (duster) to clean the Nextel coated surfaces of the enclosure. Soft fabrics will cause fluffs sticking to the rough structure of the Nextel surface.
- Only dry-clean the Nextel surfaces.
- Never use wet detergents.

SOLO



WARRANTY

Avantgarde Acoustic™ Lautsprechersysteme GmbH warrants that the products are free from defects attributable to faulty manufacture. This warranty begins on the date of original purchase and is limited to ten (10) years for material fatigue, five (5) years for the color coating and drivers, and twentyfour (24) months for all electronic components.

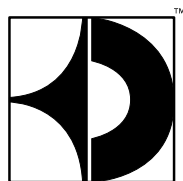
All products of the Avantgarde Acoustic™ series have been thoroughly checked before shipping. In the case of problems, please check the following:

1. This warranty begins on the date of original purchase and may be enforced only by the original purchaser. Please keep the original dated sales slip as proof of warranty coverage. The warranty period is not effected by warranty services provided by Avantgarde Acoustic™ Lautsprechersysteme GmbH or an authorized Avantgarde Acoustic™ dealer.
2. Except as specified below, this warranty covers all defects in material and workmanship in this product. Our liability for any defective product is limited to repair or replacement of the products, at our option. Any implied warranties, including warranties of merchantabilities and fitness for a particular purpose, or damages based upon inconvenience, loss of use of the product, or commercial loss, or any other damages are not covered by this warranty.
3. In case of defects, pls contact at first your dealer. In case it is necessary to ship the product to us, pls make sure that
 - the product is shipped in its original shipping box;
 - the warranty card is filled in completely and send with the product to Avantgarde Acoustic™;
 - the product is shipped free of charge to us, e.g. you must pay all shipping charges (ex. freight, insurance etc.).
4. The following are not covered by this warranty:
 - Regular inspections, tuning, repairs or replacement of parts which are attributable to normal wear and tear;
 - Damage occuring during shipment of the product (claims must be presented to the carrier);
 - Damages or scratches on the surface of the product (ex. housing, horns, metal parts, color coating etc.).
 - Claims must be presented within 3 days after the date of original purchase with your dealer.
 - Damage resulting from accident, misuse, abuse, neglect, electrical surges, lightning or other acts of God;
 - Damage resulting from failure to follow instructions supplied with the product.
 - Damage resulting from repair or attempted repair by anyone other than Avantgarde Acoustic™ or an authorized Avantgarde Acoustic™ dealer.
 - Damage to any unit which has been altered or modified by anyone other than Avantgarde Acoustic™.
5. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This warranty card has to be filled in correctly and in case of a warranty claim be send to:

Avantgarde Acoustic™ Lautsprechersysteme GmbH
 Nibelungenstr. 349
 D-64686 Lautertal - Reichenbach / Germany

PRODUCT DATA	Product type:.....
	Serial number:
	Date of purchase:
PURCHASER DATA	Name:
	Street:
	City/State/Country.....
DEALER DATA	Company stamp/Signature:.....



avantgarde[™]
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