
Valentina A8
Active Electrostatic Hybrid Loudspeaker

OWNER'S MANUAL

JANSZEN



Valentina A8 Owner's Manual

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This Owner's Guide is available in printed form upon request.

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Safety Information

WARNING: DO NOT EXPOSE THESE SPEAKERS TO RAIN OR WETNESS, WHICH MAY CREATE A DANGEROUS SHOCK HAZARD, AND MAY DEGRADE OR RUIN THE SPEAKERS.

WARNING: DANGEROUS HIGH VOLTAGES MAY BE PRESENT INSIDE THE SPEAKERS. TO AVOID THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE REAR PANELS OR GRILLS OR OTHERWISE DISASSEMBLE THE SPEAKERS. THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING: CHANGES OR MODIFICATIONS TO THESE SPEAKERS NOT AUTHORIZED BY JANSZEN LOUDSPEAKER, LTD. MAY INVALIDATE REGULATORY COMPLIANCE AND THUS RENDER THE SPEAKERS UNSUITABLE FOR HOME USE. THIS INCLUDES KEEPING THE GRILLS INTACT.

WARNING: JANSZEN SHALL NOT BE RESPONSIBLE FOR ANY PHYSICAL DAMAGES OR INJURY THAT OCCURS AS A RESULT OF MISUSE, DISASSEMBLY, OR UNAUTHORIZED CHANGES OR MODIFICATIONS MADE TO THESE SPEAKERS.

WARNING: CONTINUOUS EXPOSURE TO LOUD SOUND CAUSES HEARING DAMAGE.

SAFETY INFORMATION

Caution:

- 1. Read these instructions** – All safety and operating instructions should be read before the speakers are operated.
- 2. Save these instructions** – keep the safety and operating instructions for future reference.
- 3. Heed the warnings** – All warnings about these speakers should be followed.
- 4. Follow the instructions** – All operating and use instructions about these speakers should be followed.
- 5. Condensation** – When moving the speakers from a cold to warm location, such as during delivery on a cold winter day, moisture may condense on components within. If this should occur, the speakers might not operate properly. Consequently, after bringing the speakers in from the cold, we advise leaving them idle for a day *before connecting or powering them*.
- 6. Water and moisture** – The speakers should not be used near water – for example, they should not be placed near a bathtub, pool, sink, lawn sprinkler, etc., and generally should not be placed outdoors.
- 7. Heat and flames** – The speakers should be located well away from strong sources of heat or flames, such as fireplaces, propane heaters, stoves, etc..
- 8. Particulates** – Smoke from tobacco or cooking, aerosol or splattered grease from cooking, and air pollution over a long period of time can have a deleterious effect on any speakers, including these. In particular, **avoid spraying anything anywhere near the speakers**.
- 9. Power cords and interconnecting cables** – As with any power cords or cables, they should be routed so that they are not likely to be walked on or pinched by heavy objects. It is also important to prevent access from animals or children that may chew or otherwise damage the power cords or cables.
- 10. Liquids** – Care should be taken not to spill liquids onto the speakers.
- 11. Foreign objects** – Care should be taken not to press, poke or otherwise push foreign objects into the cloth grills, such as pencils, fingers, toy airplanes, cat claws, etc..
- 12. Cleaning** – Do not use abrasive cleaners. Do not spray or let anyone else spray any sort of cleaner, polish, conditioner, or anything else on or near the grills.

Paint: For removing dirt and finger marks, the paint can withstand glass cleaner, lighter fluid, alcohol, kerosene, or naphtha. Avoid getting any of these substances on the wood or grills. Apply any of these to a *soft cloth*. Wipe *gently*,

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because wiping hard can polish away the matte finish and leave a shiny area.

Wood: The wooden surfaces should be wiped with nothing more than a soft cloth dampened with plain water. Do not use cleaners, polishes, conditioners, or any other chemical preparation. The final coat of wax finish on the wood will be removed by most of these.

Grill cloth: The grill cloth can be vacuumed.

13. YOUR EARS – Distortion and compression are what make ordinary speakers seem loud when the volume goes up, but electrostatic speakers do not do this.

Because your Valentinas are capable of producing high sound pressure levels (SPL) without distortion or compression, it is easy to exceed safe loudness without noticing. As a general rule, if you can feel the bass in your belly, or if you have to shout to be heard by a person sitting next to you, it might be too loud.

A pair of Valentina speakers can produce a peak SPL of over 106 dB, even in a fairly large room, 112 dB in a small room, and with some kinds of music, a steady level **over 100 dB** is possible. **This can damage your ears permanently, and fairly quickly.**

If you hear ringing in your ears soon after or within a day or so of listening to loud music, you have damaged your ears, perhaps slightly, but permanently. It is also possible to damage your ears even without hearing ringing.

It is important to know --

No one notices the usual bits of hearing loss right away after each overexposure. It adds up over time. If you don't avoid exposure to loud sound, then at a relatively young age, music will sound dull, or certain notes will be missing, or you will hear constant noise in your ears, and you will have trouble understanding what people are saying, first in noisy places like restaurants, and then everywhere. If you think you may already have hearing loss, it's never too late to stop making it worse.

15 minutes is the NIOSH and CDC 2002 recommended **maximum exposure time to a steady SPL of 100 dB**. The time limit is 4 hours at 85 dB. This 4 hour time limit is cut in half for each additional 3 dB in loudness: 2 hours at 88 dB, 1 hour at 91 dB, and so on. Sharp sounds, i.e., loud transients are more damaging than steady levels, because the ears do not have time to react defensively.

SO PLEASE BE CAREFUL and you will not hurt your ears and thus your future enjoyment of music.

You can measure loudness with a simple sound level meter. If you wish to check your exposure, JansZen can supply a good quality sound level meter such as we use ourselves at modest cost. There are also apps for smart phones that

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work as sound level meters and spectrum analyzers, although they will probably miss the high frequency extremes due to microphone quality. Follow the instructions for the device or app to make sure your readings are valid.



Welcome

You have chosen JansZen loudspeakers!

Your Valentinas will bring you the utmost in music listening enjoyment through their exceptional purity and naturalness in sound reproduction. While these speakers include esoteric technology, you can rest assured that they are designed and built with the best of advanced materials and techniques, and are ready to bring you consistent, unwavering performance for decades to come.

Please feel free to keep in touch with us, letting us know anything you'd like to tell us about your listening experiences, or about great source gear or music that you have found suit you and the speakers particularly well. We're also here to help with any setup challenges or other questions.

Happy listening.

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Unpacking

Do not allow the delivery person to leave until you are satisfied that there has been no shipping damage.

If there is damage, please refuse the shipment, and it will automatically come back to us for repair/replacement. The situation will be harder to handle if you notice damage after the delivery person has left.

Carton contents

Each of the two cartons should contain one speaker and one power cord, and the carton marked “1 of 2” should also contain the remote control and a pair of corner clips. If you have ordered carpet spikes for self-installation, that carton will also contain both packages of spikes. If you have ordered cables from us, those will also be packed in the first carton.

Unpacking

The following steps will get your new speakers out of their cartons and onto your floor without mishap:

- 1) Move the carton marked “1 of 2” onto a carpeted area, or lay a blanket, bath towel, or other soft material down onto the floor to use as an unpacking surface.
- 2) Set the carton on its long side with the flaps up, which matches the “this side up” markings on the sides of the carton, and slice through the tape to free the flaps. We’ll call this side the top.
- 3) Remove the accessories.
- 4) Bend the flaps back as far as possible. Use the corner clips to hold the flaps down.
- 5) Roll the carton completely over onto the now folded-back flaps, so that the open top is downward.
- 6) Lift the carton away and set it aside.

UNPACKING

- 7) Lift the blue foam insert away from the speaker.
- 8) Grasp the top end of the speaker, pressing the remaining blue foam insert against the speaker so that the two do not separate.
- 9) Gently tilt the speaker up onto its top until it is vertical, then further until the free feet touch the floor.
- 10) While continuing to support the speaker, remove the remaining blue foam insert, and let the speaker down onto all its feet.
- 11) Tilt the speaker forward and clip the tie that holds the bag shut, then slip the bag up and off.
- 12) Remove the protective film from the cabinet.
- 13) We advise that you retain all packing materials in case you want to sell or return the speakers. The cartons can be folded flat, and the inserts can be interleaved to occupy less space. *When re-packing, it is critical to wrap the speaker in stretch film before replacing the bag, or the paint will be damaged by rubbing against the bag in transit.*

Feet

If the speakers were fitted with rubber feet, and you wish to switch over to carpet spikes:

- 1) Lay the speaker onto its face on a carpeted or other soft surface.
- 2) Using a #3 Philips screwdriver, remove the screws holding the feet in place.
- 3) Locate the studs in the package of spikes.
- 4) Screw the studs into the inserts in the speaker base. The studs have a slot at one end to facilitate this.
- 5) Screw the spikes onto the studs.
- 6) If the spikes have been ordered for use on carpeting, as we would advise for making firm contact with the floor, ensure that the adjustable tips are screwed in tightly.
- 7) If the spikes are for use on hard floors, coin-like metal pads are included to avoid damage to the floor, and the adjustable tips can be used to accommodate uneven surfaces.

Grills

The speakers are designed to offer optimal sound reproduction with the grills in place, and they also help protect the electrostatic elements, both from mechanical damage and from collecting particulates from the air.

The grills are permanently installed. Removal or attempted removal will cause irreparable damage.



Moving

The speakers weigh about 28 kg [62 pounds], so they can be hard to move for someone working alone. If you are unpacking these alone, here are a few suggestions.

Large movements

The easiest way to pick one up is:

- 1) Ensure that your clothing presents no exposed hardware, such as a belt buckle, snaps, rivets, buttons, etc., that could come into contact with the speaker and scratch the paint or wood.
- 2) Standing to one side, tilt the speaker forward, allowing it to rest on one hand.
- 3) Grasp the far upper foot on the base with your other hand.
- 4) Lift *using your knees*. Do not strain your back by lifting with your back.
- 5) To get through doorways, rotate the speaker onto your hip or up onto the hand that is grasping the foot.

Small movements

When fitted with rubber feet, the easiest way to move the speakers by small amounts is to tilt it onto two feet and walk it along by rocking it back and forth onto one foot at a time while rotating it on one foot at a time.

When fitted with carpet spikes, damage to the carpet is likely when attempting to walk the speakers. In this case, you would do well to place a pair of wooden or plastic slats under pairs of feet and slide the speaker along on these like a sled. Plastic slides such as [Magic Sliders](#) are also available at hardware stores for this purpose.



Cleaning

Wooden baffles

The final wood finish coat is wax, which will be removed by most cleaners. Wipe only with a soft, damp cloth.

Painted and metal surfaces

These surfaces can withstand strong cleaners as well as alcohol, but **do not spray anything directly onto the speakers**. Dampen a soft cloth with your solvent or solution of choice, and wipe gently with that. **Any aerosol that gets into or through the grills can cause electrostatic panel failure.**

Grill cloth

The grill cloth can be vacuumed directly with a brush attachment.

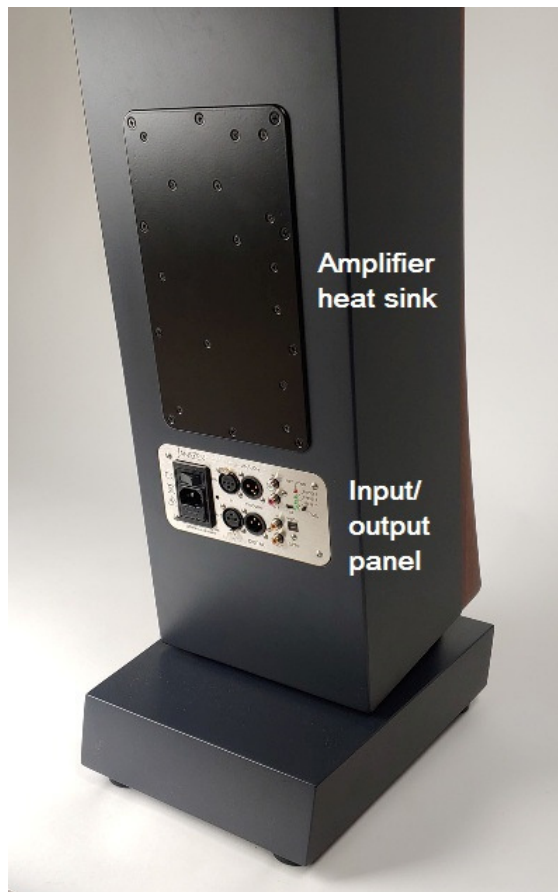
Warnings

- **Do not spray anything near the grills. Any sort of cleaner or water mist can cause electrostatic panel failure if it gets through the grill cloth.**
- **The grills cannot be removed. Removal will cause damage that will be difficult or impossible to repair.**

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Quick Start

The interesting things about this model are its built in biampification and signal processing, and the low mass woofers. The amplifier unit is mounted to the inside of the black heat sinking plate at the back of the speaker enclosure. The inputs and signal processing circuitry are mounted to the input/output panel below the amplifier plate.



QUICK START

To get started as quickly as possible:

- Place the speakers so their upper rear corners are about two feet [60 cm] from the front wall.
- Toe them in so their axes cross a foot or two [30 – 60 cm] behind your seat.
- The back tilt should be set so that the speakers are aimed at your chest. The adjustment is made by way of thumb screws on the feet. With the feet fully seated, the tilt is set for about an 8' [2m] listening distance and 38" [1m] ear height. You can just leave them this way for a first pass, unless your listening position is substantially different.
- Connect the digital coax cable from the lower digital RCA jack (output) on the right speaker to the upper digital RCA jack (input) in the left speaker. This will allow the remote control to affect both speakers. **The digital RCA cable must be connected at all times for the speakers to operate correctly.**
- Connect the power cords.
- Insert the battery into the remote control.
- Connect a source to one of the inputs. Digital sources are connected to the right speaker and only the right speaker. Analog sources are connected as usual, one left and one right.
- Power each speaker on using the rocker switch just above each power inlet.
- Press the on/off button on the remote control to set the speakers into standby – the LED indicator on the right speaker will go dark.
- Press the on/off button again to bring both speakers out of standby – the indicator will now be green. This ensures that the two speakers are in sync.
- Hit play on your source.
- Sound should be coming from both speakers within a couple of seconds.
- The speakers go into standby mode after 15 minutes of silence.



Remote Control

The remote control is an IR type (infrared). As such, it generally requires a direct line of sight to the right speaker to operate. In some cases, walls can be optically reflective/dispersive enough to allow operation at odd angles, but normally the remote has to be aimed right at the upper inboard side of the right speaker baffle to function reliably.

The remote can control all the speaker's main functions: on/standby, mute, volume, preset, and input. The remote itself, like most of the electronics, is a product of Hypex, which we modify only slightly.

- Battery: CR2023 3V Lithium button cell.
- Protocol: standard Philips RC5.

Control buttons



1	On/standby
2	Volume up
3	Volume down
4	Previous input
5	Next input
6	Mute
7	Preset 1
8	Preset 2
9	Preset 3
10	Currently unassigned, but hopefully a future firmware update will make this button *Set auto-detect*
11	Superfluous – all functions are immediate

REMOTE CONTROL



Indicator LED and IR sensor on a left master speaker.

Status indicator. There's an LED indicator near the top of the right speaker. It serves the following functions:

Green	Unit is on
Green, flashes once	IR command received
Green/red random flashing	Output clipping
Green, blinking slowly	Output muted, or input awaiting signal
Steady red	Fault condition or DC error*
Red, blinking 1x/sec	High temperature, output limited
Red, blinking 2x/sec	Over temperature, output off
Off	Standby

* On early shipments, a steady red indicator also meant standby, and the indicator was never off.



Setup

Connections

The Valentina A8 is equipped with a variety of inputs, both analog and digital. The speakers are factory programmed to scan the inputs and automatically detect which one is receiving a signal. The remote can be used to manually select the input, which will override auto-detection.

Regardless of other connections, a digital coax cable (RCA) must be connected between the coax output on the right speaker and the coax input on the left speaker. Otherwise, the remote will not affect the left speaker.

The advantage of auto-detection is pretty obvious – you can connect multiple sources and have the speakers determine which source is playing. As long as you take less than about 15 seconds to change media or select a track, the sound will start playing immediately.

Its disadvantage is that, if there's been no signal for more than about 15 seconds, the sound will be muted for a second or two after the signal is first applied. In that case, this delay will cut off the first couple of seconds of the music.

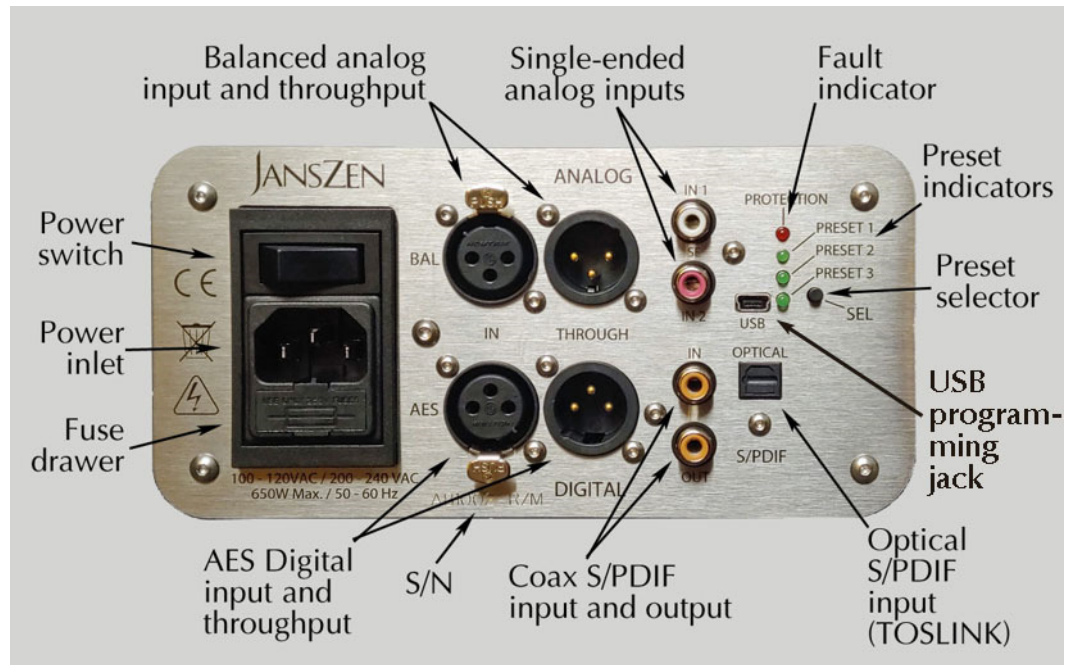
This happens because, after having no signal for more than about 15 seconds, the auto-detection function checks whether the silence has occurred because the source has changed. It checks by scanning all six inputs, one at a time, and listening for a signal. It takes a second or two to scan the silent inputs and then lock onto one that has a signal.

If your preference is for instant-on after you take some time to change media or select a track, then by all means, select the active input manually using the remote. The drawback

SETUP

is that it will take repeated input selection button presses until sound is heard the first time each input change is needed. After that, however, playback will be immediate.

The Valentina A8 can accept both analog and digital inputs. There's also a USB jack for field programming the DSP.



Analog inputs. Both of the usual types of analog inputs are available, namely balanced (XLR) and single-ended (RCA). Each has a second jack that can be used as a feed-through for daisy chaining to another piece of equipment or to another speaker.

The input impedance is quite high (44 k Ω balanced, 54 k Ω single ended), so the speaker's input will not significantly load down a line that's daisy chained to something else.

Please ignore the fact that one RCA jack's core is red and the other's is white. The two jacks are connected together and thus interchangeable.

If your source has both digital and analog outputs, the digital inputs are recommended. This will avoid an additional analog-to-digital conversion, which it stands to reason should produce the best result.

SETUP

Digital inputs. There are three types of digital input jacks: XLR, RCA, and optical. They're effectively equivalent, although some people have a personal preference. Each is for one or another flavor of S/PDIF.

Notes:

- 1) For the purpose of operating the remote and for operation with the digital inputs, there is a designated master and follower speaker. The standard setup is for the right speaker to be the master.

The master speaker receives the digital input for both speakers, and plays the data for that side. The other speaker receives the opposite channel data from the master speaker through a digital coax (digital RCA).

- 2) The master speaker has the front indicator LED and remote IR receiver embedded in its baffle. It sends the remote data across the digital RCA cable to keep control of the two speakers in sync. For this reason, the two speakers must be interconnected at all times.

A digital RCA cable must always interconnect the two speakers, from the right speaker's digital (S/PDIF) RCA output to the left speaker's digital input.

- 3) If you special ordered your speakers with the left-right roles reversed, then reverse all handed instructions, e.g., left and right. And don't forget to keep the speakers interconnected with a digital RCA cable.

RCA (coax S/PDIF). The yellow-cored RCA jacks are for input and output of coax (wired S/PDIF). It's important to use cables meant for digital signals, not audio RCA cables.

The upper digital RCA jack on the right speaker serves as the input for both speakers. It's for connection to any source's digital RCA output. The lower digital RCA jack on the right speaker is the output. It's for sending the left channel audio and the remote control data to the left speaker.

The upper digital RCA jack on the left-hand speaker is for receiving the left side audio and also the remote control data from the right speaker.

The output jack (lower yellow RCA) on the right speaker must *always* be connected to the input jack (upper yellow RCA) on the left speaker.

SETUP

Optical (TOSLINK S/PDIF). This may be the best way for a home setup to get a digital signal from a source to the master speaker, because light can't be affected by interference.

If you have more than one digital source, however, it's handy to be able to use the other digital inputs along with auto-selection or the remote control to switch between them, instead of requiring an external multiplexer.

XLR (AES3). AES-EBU is a standard for use in studios, where most equipment uses it for interconnection. The data protocol is different from S/PDIF, but very similar. Home studios using professional equipment will also find themselves using it.

Adaptation

HDMI: If you'd like to drive the speakers directly from your TV or other device that has only an HDMI output, there are converters that transparently separate the S/PDIF signal from HDMI. You can connect the output of such a converter to these speakers.

Lightning: If you'd like to drive the speakers by a wired connection from an iPhone, there are adapter cables that convert Apple's Lightning output to HDMI. Such cables can then be connected to an HDMI-to-S/PDIF adapter, as just above.

USB. If you'd like to connect the speakers to a computer that has only USB connectivity for audio, you can obtain a USB-to-S/PDIF converter for that purpose. High resolution files will have to be down-sampled to 192 kHz/ 24 bit PCM to match the maximum available from S/PDIF.

Bluetooth. Bluetooth aptX-HD is a standard that slightly exceeds the resolution and sample rate of CD's. It's thus perfect for streaming the better services, like Tidal's HiFi. Receivers are available for the Bluetooth signal sent by a phone or tablet streaming such a service, and the result is indistinguishable from CD playback.

It's important to make sure the phone and the service are both set up for highest resolution (sometimes titled *sound quality* in the phone options). Note: Apple doesn't support aptX-HD, so Bluetooth won't work as well with an iPhone, but most of the better new phones from the other makers do support it.

SETUP

Indicator lights

On the rear panel, there are three green LEDs that signify which signal processing preset is active. This LED will blink slowly when there is no signal detected. There's also a red LED that indicates clipping or fault conditions, as follows:

LED Behavior	Meaning
Random blinking	Amplifier limiting / clipping
Blinking once per second	High temperature
Blinking twice per second	Over temperature
Steady on	Fault or DC error

Presets

The signal processor has three presets. These are intended to compensate for a range of front wall distance, or more generally, the distances of nearby room boundaries and the size of the room.

To select between them, press the F1, F2 or F3 button on the remote control, which correspond to presets 1, 2, and 3 respectively.

Preset changes occur quickly. When an F-button is pressed, the green indicator on the right speaker baffle will flash once, and by the time it's done flashing, your speakers should be done switching over to the newly selected preset.

The standard presets comprise three levels of bass reinforcement to complement the room size and wall proximity. The depth of bass extension is reduced for higher degrees of bass boost to prevent risk of excessive woofer excursion at high SPL.

Preset	Effect	Distance of upper rear corner
Preset 1	No bass boost, 20 Hz bass depth	2'' – 12'' from front wall
Preset 2	3 dB bass boost, 25 Hz bass depth	12'' – 20'' from front wall
Preset 3	6 dB bass boost, 30 Hz bass depth	20'' – 36'' from front wall

The above front wall distances assume a medium sized room and moderate proximity to the side walls.

If you have requested special presets, they'll be documented elsewhere.

If one or both speakers stop playing when you change presets, try switching the preset again. If one or both speakers remain silent, then please refer to the section just below about input selection.

Input selection

The speakers are shipped with all three presets configured to automatically detect which input has a signal. You are also able to select inputs manually using the remote control by pressing the right or left arrow buttons.

It's important to avoid manually selecting an input inadvertently, because this will disable auto-detection, and it's not always obvious how to get back into that mode.

If you have decided to select inputs manually by using the left and right arrows on the remote control, it's important to note that the **input settings are stored together with each preset**, and they are recalled when changing presets.

For instance, if you are using preset 1 with the digital coax input, and then you switch to another preset, you'll find that whichever input had been most recently selected for the new preset will become active. If it's the same input you were just using, then you'll only hear a change in bass prominence. If it's a different input, there will be no sound.

Selection order. When using the remote control's right arrow for input selection, the inputs become active in the following order:

- Auto-detect
- Analog XLR
- Analog RCA
- S/PDIF RCA
- AES
- S/PDIF Optical
- No connection (future option as of this writing)

The left arrow changes the inputs in the reverse order. Once you've stepped through all of them in either direction, the sequence starts over.

Restoring auto-detection mode

If you've inadvertently pressed one of the arrow buttons once, and you remember which one it was, then just press the opposite arrow button once. That should return the current preset to auto-detection mode.

SETUP

If you're not sure which one was pressed, or how many times, the procedure is still fairly simple.

There will be two selections that let sound come out: one sets a manual selection of the current input, and the other sets auto-detection. Here's how to tell which is which:

After pressing the arrow button until there is sound, auto-detection will be the one that takes a little more time before the green indicator comes back on after blinking off, whereas direct selections blink the indicator quickly. When you've selected auto-detection, there will also be a brief delay between the sound from the left speaker compared to the right one.

Placement

At mid and high frequencies, the Valentina's directivity keeps the stereo image from being affected by room placement in all but the most reflective rooms. As with any non-dipole speakers, though, the bass is practically omnidirectional, so nearby walls will reinforce it.

A good starting setup:

- The speakers are acoustical mirror images of each other, and optimal sound occurs in the sweet area (inboard) when so arranged. The speaker with the even serial number should be placed to the right, and the odd to the left. The side tweeter should be aimed outward, namely toward each near side wall, and not toward the center.
- Arrange into an equilateral triangle setup, that is, an equal distance between the speakers and each other, and between each speaker and you. Of course, some will prefer or be practically limited to a smaller angle between the speakers, which is perfectly fine. It can be argued that an equilateral triangle setup is just an artifice cooked up in the early days of hi-fi in an attempt to standardize things. In reality, it makes little difference, other than the obvious, namely affecting the stage width.
- Aim them slightly less toed in than directly at your listening position, so that their axes cross a foot or two behind you.
- Position fairly close to the front wall, with the rearmost corner between 24 and 36 inches [60 to 80 cm] out.
- Correct proximity to the walls can be very important for bass reproduction, because these speakers are designed to rely on wall reinforcement, but not too much or too little. When the speakers are close to both front and side walls, however, better bass might be had with a bit more distance from the front wall.

SETUP

Also, changes to the distance from the walls can be used to decrease excitation of a problematic room mode.

- Position each a different distance from the side walls as from the front wall, to prevent overlap of the reinforcement spectra. For smoothest bass, the side wall distances should be asymmetrical, with the pair shifted a foot or so to one side, and for the very best imaging, symmetrical, although the reduced wall splash minimizes the imaging blur from an asymmetrical setup.
- Tilt back the right amount for facing upward directly at each of your shoulders or chest. They ship set up for a listening distance of 2.5 to 4 meters [8 to 13 feet] at a 1 meter [39 inch] height.
- AirLayer at -12 dB to -10 dB.
- Use preset 2
- **Make sure the two speakers are interconnected with a digital coax running from the right speaker's digital RCA output to the left speaker's digital RCA input.**

Tips

- Too much bass? Try a lower preset or moving the speakers away from walls, and particularly out of corners.
- Not enough bass? Try a higher preset or moving them closer to walls or corners or changing the preset to a higher number.
- Lumpy bass?
 - Try making the side to side position asymmetrical, e.g., moving the pair together off-center. In extreme cases, such as square rooms, adding wide-bandwidth bass absorption or even tuned traps may be necessary.
 - If you have a very bass-reverberant room, such as having thick concrete walls and no bass absorption, there's a nice trick on [page 34](#) that can oftentimes greatly improve the bass smoothness.
- Imaging problems?
 - If your back wall is closer than about 10 feet [3 meters] behind you, try adding some absorption (if your room is lively) or diffusion (if your room is already well damped) to that wall.
 - If your listening seat has a high back, change to a seat with a back that does not come higher than your shoulders.
 - Try moving them farther from the front wall, while realizing that the trade-off will be less bass.
 - Experiment the amount of back-tilt.

SETUP

- Add absorption or diffusion at the side wall first reflection points.
 - Make the side wall distances equal.
- Upper treble response can be rolled off to taste by reducing toe-in.
- Experimenting with the back-tilt can also tailor the response, but will produce changes that are more radical than from changing the toe-in; in particular, a treble dip will be created when significantly off the ideal tilt angle. Also, changing the back-tilt away from a straight-facing aim will degrade time-alignment.
- The back-tilt adjustment can be accomplished in a few ways:
 - Best: Hang a small mirror from the top of the speaker using tape or string, so that it rests against the rectangular grill. Its center should be about 6" [15 cm] from the bottom edge of the grill. Make a mark or stick a small bit of tape on the mirror at 6" [15 cm] from the bottom of the grill and centered side-to-side. Sit at your listening position, with your head facing forward. When you can see your right eye or ear at the mark on the mirror, the tilt is correct.
 - Shine a flashlight toward the speakers from about 4" [10 cm] above the head while seated at your listening position (or shoulder height for pre-2014 models) and watch for a reflection halfway up the speakers from the baffle next to the rectangular grillcloth.
 - Affix a laser level to the center of the side of one speaker, and make the beam strike a piece of paper suspended at the height mentioned just above.
- When there is too much deep bass, and the only solution is to deviate from an equilateral triangle to get the speakers away from side walls, this will obviously narrow the soundstage, but could be worth it.
- For recordings made using a Blumlein microphone arrangement, a 90° angle between the speakers is best, although this is hard to arrange in most rooms without sitting very close to the speakers, which not everyone will want to do, and where the drivers do not converge as well in time. In many cases, a very wide arrangement is just more enjoyable for the extra soundstage width, and the image is always crisp enough to support this without degrading focus. (We can program presets that correct the time alignment at very close distances – inquire if interested.)
- For the most holographic effect, try two-microphone recordings, especially binaural!

For details about optimizing the back-tilt, please see the section about tilt. Also, there's a tilt solving spreadsheet on the web site under the [TECHNICAL](#) menu.



Connecting and Powering

Cables

Analog

XLR vs. RCA. Balanced cables are inherently transparent and immune to the effects of cable length and noise pickup. This is why they're used in practically every studio that records and engineers musical recordings, and are also used in live performance venues where cable runs can be hundreds of feet long.

Just as the studios choose cables, if using balanced interconnections, you will generally do equally well with a pair of \$20 - \$50 microphone cables from your local musical instrument / pro-audio store or Amazon, as you would do with something high priced.

If your equipment has RCA outputs, then you can get perfectly good results using your existing RCA (single ended) cables. Given the relatively short cable runs and small amounts of radio interference in a typical home setup, balanced runs offer little or no advantage.

Digital

Since digital cables carry just ones and zeros, that is, just two voltage levels, they're inherently immune to interference. There also has to be something very wrong for the data to become corrupted in the cables or at the wire terminations or jacks. Immunity is even stronger for optical digital cables.

We recommend using whichever cables you feel comfortable with, but once the price gets over about \$20, price is no clue to quality.

Power

The power cords carry current for the amplifiers as well as the bias supplies that charge the electrostatic panel membranes. The amplifiers draw substantial current on major transients, such as hard bass drum hits when the volume is way up.

Upon such transients, each speaker can draw as much as 8A from 120V mains [4A from 240V mains]. Source equipment that is not immune to voltage variations may be affected.

The power supplies for the amplifiers are immune to power line surges, dips, or noise. They are also able to react instantly to heavy transient draw as well as any pull-down in the mains voltage that may be caused by such transients, so special cords or high current house wiring is unimportant. In antique homes with original wiring, however, room lighting can dim noticeably with each drum hit.

We supply cords that can carry the current sufficiently well.

The bias supply circuit is unrelated to the signal path, and also has no susceptibility to airborne or power line borne electrical interference.

There is consequently no benefit to using a special power cord.

The bias supply and amplifier will work correctly with any mains voltage, and if the speakers are moved internationally, suitable power cords or adapters for any wall socket arrangement can be obtained worldwide and used without concern for converting the voltage.

Powering

As implied in the previous section, the speakers must be powered to obtain sound. You may note that there is an on/off power switch. The speakers may be left powered on at all times without harm, but if they will be left idle for an extended time, or if the air often contains smoke or other contaminants, it is best to power them off.

The speakers can be powered on at any time relative to the other equipment, without regard to the power-on sequence.

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airLayer

Description

The Valentina/zA2.1A speakers are very directive in the vertical, and rather directive in the horizontal. This serves to minimize the involvement of the room, thereby making setup easier, and maximally conserving the recorded ambiance and the precision of the image. With recordings that do not have realistically recorded ambiance with well conserved phase information, a potential drawback is the perception of a closed in soundstage, extending only from one speaker to the other.

The airLayer feature comprises a high grade ring dome tweeter mounted outboard on each speaker, firing sideways toward its near side wall. The original purpose of bouncing some sound off the side walls is to widen the soundstage and provide a sense of spaciousness that can be missing from directive speakers such as the Valentina when playing recordings that do not well represent hall ambiance. It can also be used, when turned up to higher levels, to provide treble when standing, moving about, or listening from another room.

These tweeters are wired in phase with the sound coming directly from the front of the speaker, and the point source sound that reflects from the side walls is not strongly correlated with the direct sound. As a result, what's heard in the listening area resembles what will be reflected from the side walls of a concert hall, and the sonic reflections from the side wall cause relatively minor softening of the image. The benefit is the same sort of airiness as with less focused speakers, but without the drawbacks.

Setup

The airLayer is continuously adjustable with a dial on the back of each speaker. You have the opportunity thus to compensate for asymmetric rooms, such as open on one side and having a near side wall on the other.



Fig. 2 airLayer level control

Note that the bezel is marked in minus dB, from minus infinity, namely off, to 0 dB, namely all the way up.

In a typical room, a setting of -12 dB to -10 dB is generally appropriate. In the usual setup, with the side walls a few feet away, a setting of -10 dB is a good place to start. Their sound should not be obvious. The effect is meant to be subtle and not call attention to the side tweeters.

If the side walls are different distances from the speakers, or have different types of materials, you can adjust the airLayer asymmetrically to match.

When determining the best settings, it's helpful to turn down the electrostatic level all the way to -6 dB and wait a few minutes for the electrostatic output to decline. This will make it easier to tell when the side tweeters are balanced, i.e., giving a centered image. Pink noise is okay for this, but white noise will be better.

As you adjust for overall effect, you maintain balance by keeping the difference in dB between the left and right settings the same as it was when you first adjusted them.

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Backward Tilt

Valentina A8 speakers are very directive in the vertical. There is thus about a 9" [22 cm] range of ear height that will experience nearly full spectrum sound, e.g., ± 3 dB to 15 kHz. The window for extension to 20 kHz is a bit shorter, more like 5" [13 cm]. If you were interested in extension to 30 kHz, there are two shorter windows, one above and one below the exact central axis (perpendicular to the centers of the speakers), as is explained farther down.

In addition, the backward tilt serves to present the sound from all the drivers in phase ("time aligned") at your ears, which improves the smoothness of the frequency response by minimizing the effects of interference between the drivers, and creates a high degree of phase coherence.

It is thus important to ensure that your speakers are tilted so that they are both equally well aimed upward at your ears when you are in your usual listening position.

The speakers are shipped with the angle set for a listening distance of 8' (ideal) to 12' [2.5 to 3.6 meters] from each speaker, with a nominal ear height of 38" [1m]. Since listening heights and distances vary, you might benefit from some experimentation with the angle.

You can prop the front or rear of the speakers with books, tableware, whatever, until the vertical centers of the speakers are fairly close to being aimed directly at your ears.

You can then make your new angle permanent by screwing the feet part way out of the plinth, and fixing your setting with the thumbnut on each screw.

The speakers are supplied with adjustable feet at the front of the plinths under the assumption that more people will want to listen at a distance of 12 feet or less. If you are listening from a great distance, you may have to swap the front and rear feet.

To remove the feet, set the speaker on its face. The rubber feet are held on with screws that take a #3 Phillips screwdriver. If your pair has carpet spike, they're screwed onto studs, and are turned counterclockwise to remove them.

TILT

Back tilt details

There are two electrostatic transducer panels behind the central, rectangular grill. Each is 7" wide x 8" tall. They're mounted one above the other.

They are canted relative to one another, meeting at a 6° angle, that is, one is tilted 3° upward compared to the face of the baffle, and the other 3° downward. This is to spread the treble sound into a taller listening window than would otherwise occur. Without this angle, the tall combined height of the two panels would create a listening window that's only about a 1" [2.5 cm] tall. An angle greater than 6° angle creates too much treble droop on axis.

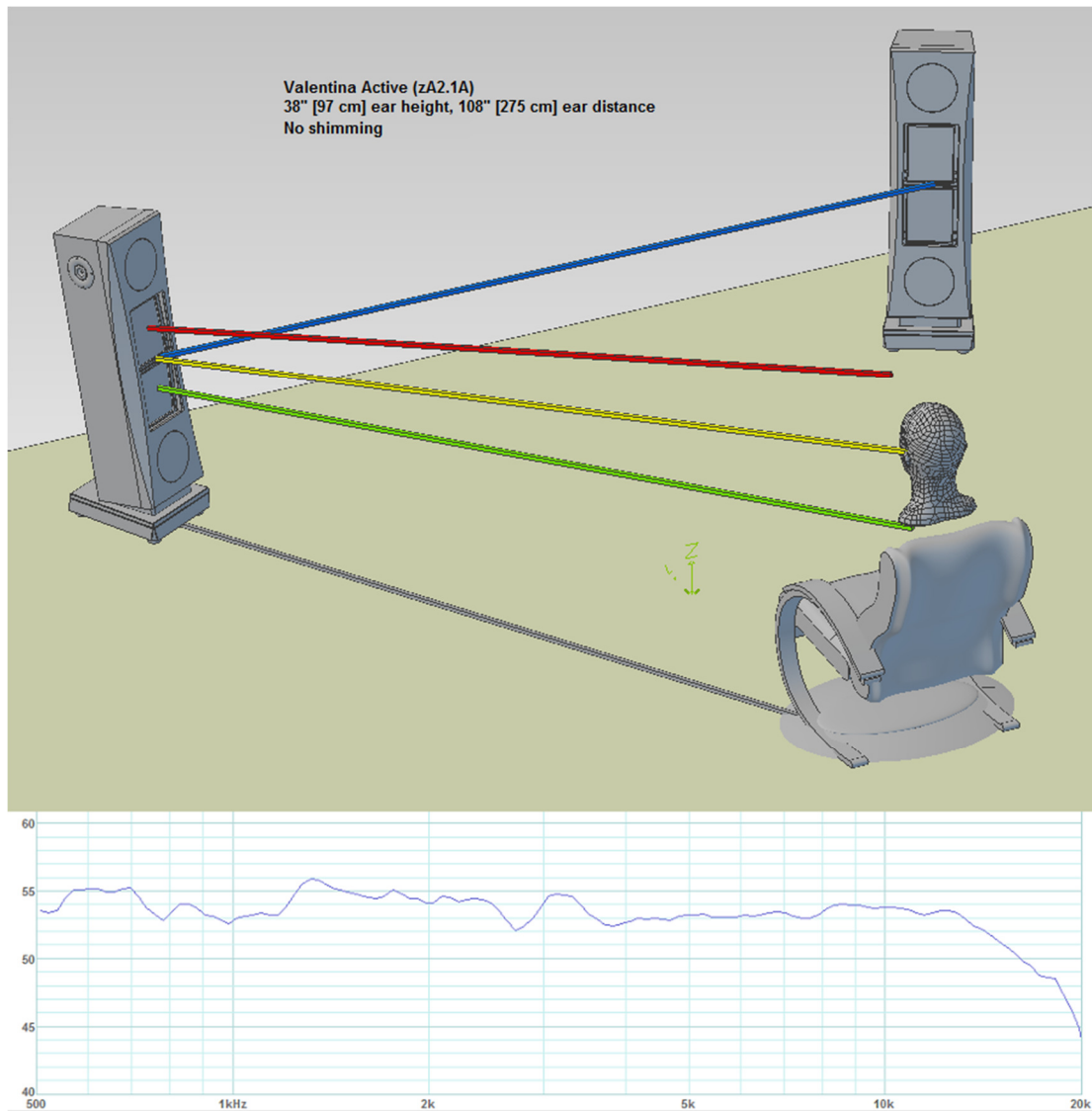
The following pages present a series of diagrams showing what happens to the sound at different cabinet tilt settings. In the diagrams, the red line is the axis of the upper panel, the green line is the axis of the lower panel, and the yellow line is the central axis, e.g., perpendicular to the middle of the baffle. (The blue and gray lines have to do with making an equilateral triangle, which is not important in this context.) The response plots were taken in my office, so please excuse the ripples.

TILT

Not enough tilt

The first diagram illustrates the situation when the speaker is aimed exactly at the ears. In this case, each panel is aimed 3° above or below straight at the ears. This causes some response droop in the top octave, but otherwise the curve is pretty flat.

Because the droop is simply due to aperture effect, there is no impact on phase, so if you are someone without much hearing sensitivity above 15 kHz, there would be little point in further adjustment if the speakers arrived this way, which they generally won't, because we ship them with a typically ideal amount of front foot elevation.

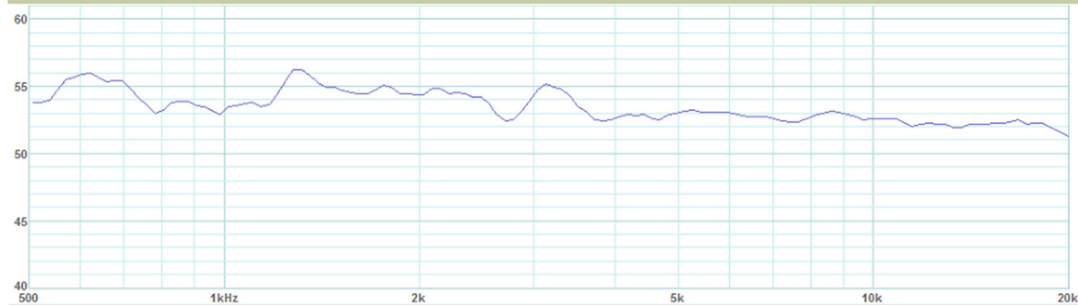
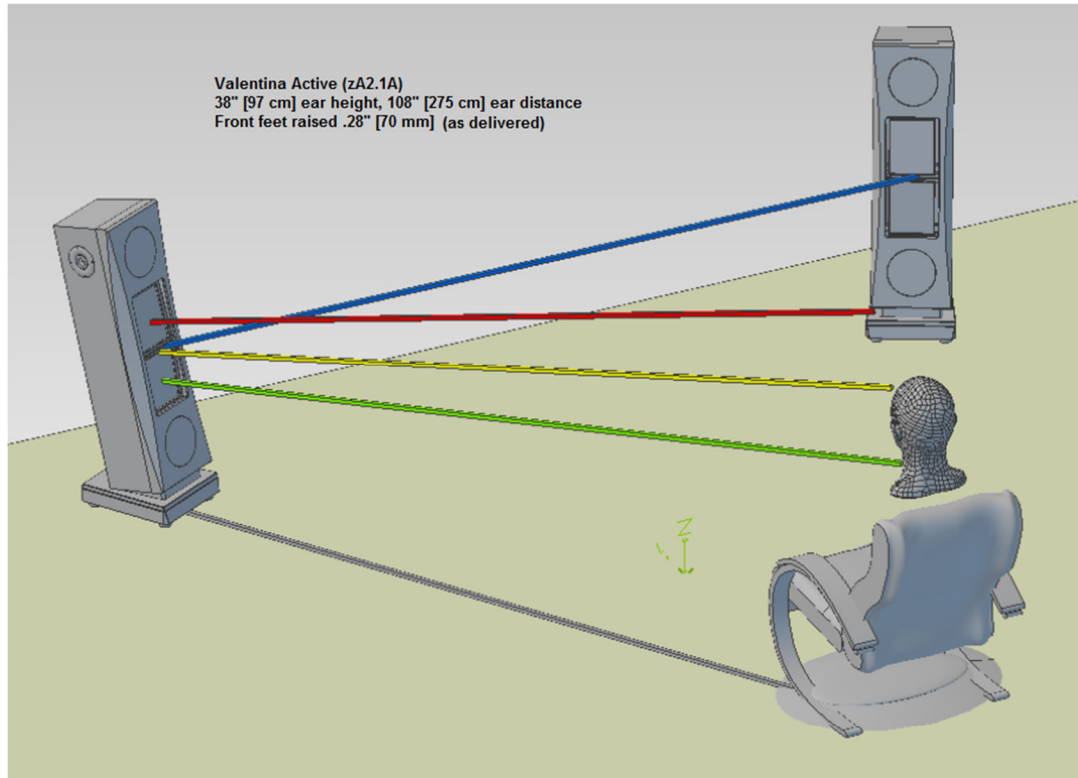


Ideal tilt

TILT

The next diagram illustrates the ideal tilt angle for the 38" [97 cm] ear height at 9' [275 cm] distance shown. This is where the aim is midway between having either the central axis or the lower panel aimed directly at the ears, which is how the speakers are shipped.

The gentle roll-off in the treble response is a deliberate feature of the active version's equalization. It creates a more natural presentation than an absolutely flat response, considering the usual microphone placements when making recordings. The passive version rolls up a bit in the treble, which is corrected by reducing the toe-in.

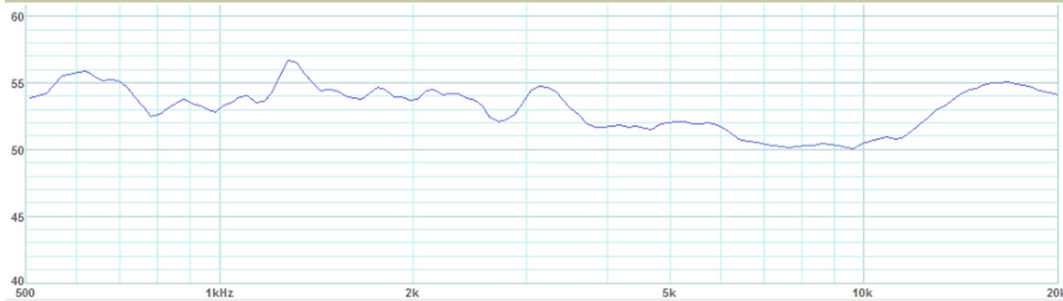
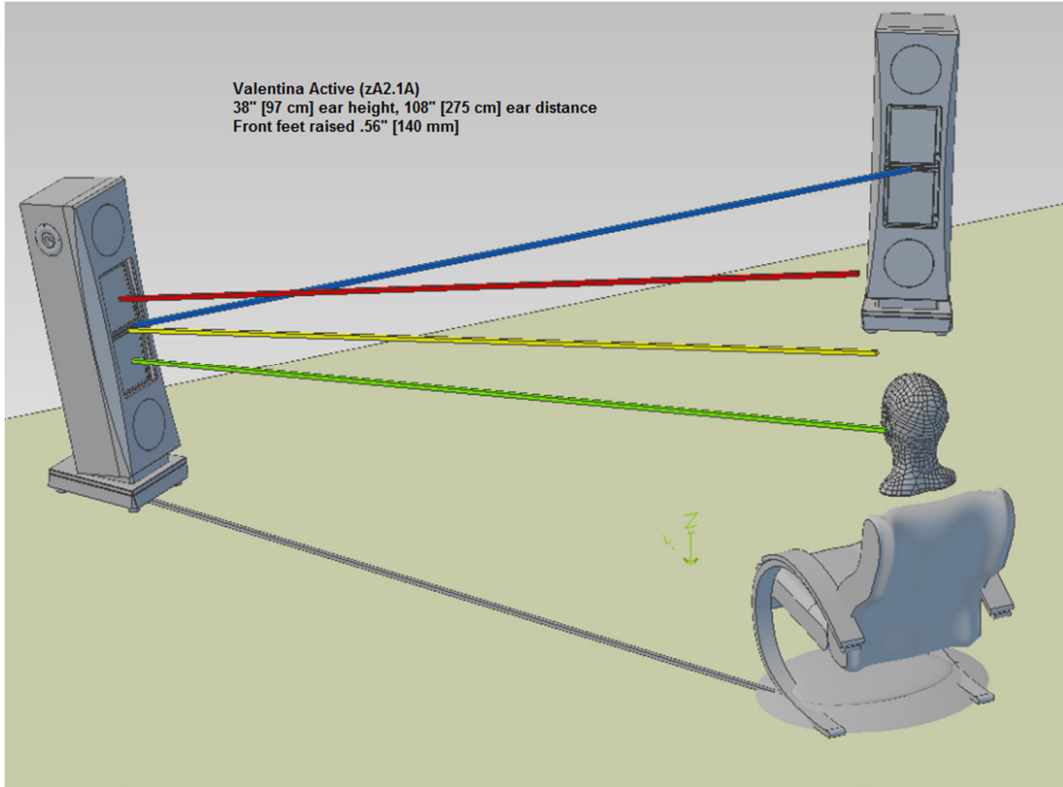


Too much tilt

The last diagram illustrates what happens when the lower panel is aimed directly at the ears. Interference effects between the two panels cause a mid-treble dip, and the on-axis response of the lower panel causes an upper treble rise.

TILT

Of course, these deviations are still well within what is generally accepted as an adequate ± 3 dB response flatness, and the narrow bandwidth smoothness remains impeccable (no peakiness). While the effect of this degree of tilt will be undetectable to most people, just possibly making the speakers sound slightly dark, I consider it worth avoiding, nonetheless.





Setup Details

Stereo Image

The stereo image will be usually best when an equilateral triangle is created by the speakers and the listening position. On the other hand, there is a strong argument that this angle was simply made up for no good reason other than memorability, and everyone should use whatever they want.

It is very important to avoid the use of a high backed chair that will reflect unwanted sound into your ears with practically no delay, even when the headrest appears to be made of soft, sound absorbent material. This has a disastrous effect on realism as well as the stereo image.

Lastly, if the back wall less than a few meters [ten feet] behind the listening position, it is helpful to add absorbent material there, such as heavy curtains or a decorative carpet. If you are not averse to the appearance of diffusors, adding those instead of absorption to that area will help, and do so without decreasing “air”.

Room Compensation

In a moderately lively, fairly large room, you will probably get the best sound when the speakers are toed in so that they face directly toward you or toward a position a couple of feet behind you. This will also give the widest seating area with uniform sound from both speakers.

Exaggerated Treble

The upper treble might be exaggerated by reflections from the wall behind the listening position, or by a generally lively room, that is, one with lots of hard surfaces and not many soft ones. This can be counteracted by reducing the amount of toe-in.

If your speakers are equipped with an electrostatic panel level control, and the mid-treble is exaggerated, it will probably be best to decrease the setting. Be aware that it takes a long time to this control to response to decreases (not increases), so the best way to approach

SETUP DETAILS

this is to leave the speaker turned off for 15 minutes or so, turn the control all the way down, then increase the level until you are satisfied.

Exaggerated Bass

If you find that it is necessary to place the speakers very near walls or into corners, the bass will be reinforced by the nearby surfaces. The first thing to try is a lower numbered preset. If this proves inadequate, and your equipment has a bass knob or low frequency equalization control, or your file player has some DSP capabilities, that will be the next best way to handle the situation. Otherwise, if your speakers are equipped with an electrostatic panel level control that is not all the way up, set it so.

Note that there is no file player software at this time that can perform DSP directly on DSD files, i.e., your player EQ will only work on PCM files. If you need your player to EQ DSD files, you'll need to set it to convert the streams to PCM.

Room Boom and Suck Out

Room resonant modes can cause certain bass notes to be greatly exaggerated and others to be nearly missing. Properly tuned and positioned bass traps are the ultimate solution, but no one will blame you if you don't want to bother or will be surprised if you suffer restrictions on décor.

You can make some headway against these effects with no additional hardware by decreasing the setup symmetry. This is done by placing each speaker a different distance from each side wall and for the ultimate effect, rotating your entire listening triangle 10 or 15 degrees relative to the walls. Fore and aft adjustment of the listening triangle will also have an effect.

Also, by changing one's seating height, one can get one's ears more or less away from where the floor/ceiling mode has its strongest effect.

Anti-node trick

There's a trick we use at audio shows, where the room is usually a concrete box with practically no bass absorption from the walls and a generally inconvenient ratio of room dimensions. You can minimize how much your room's most prominent bass modes are excited by finding their anti-nodes, placing the speakers in two of them, and perhaps also sitting in one of them.

You'll need an RTA with a resolution of at least 1/12th octave.

SETUP DETAILS

Here's the procedure:

- Set one speaker into a corner of the room. If your main speakers are too hard to move around, this could be any speaker, as long as its woofer(s) are about the same height as the one(s) in your main speakers.
- Set the RTA display to update fairly quickly, e.g., with not too heavy averaging.
- Set the RTA's signal generator to make pink noise and turn it on. The volume doesn't have to be loud, but loud enough to be a few dB above the ambient noise.
- Use the microphone to sniff around the perimeter of the room while keeping an eye on the RTA display. Keep the microphone either at a height that is the same as your ear height when seated and listening to music, or the same as the speaker's woofer height, or if the speaker has two woofers, the average height of the woofers.
- Sweep the mic back and forth at varying distances from the walls, say from one to three feet away [30 - 100 cm].
- You'll notice a couple of bass frequencies that have large humps, probably below 100 Hz, and certainly below 120 Hz. Take note of these frequencies.
- Now set the RTA's signal generator to make a sine wave at the frequency with the tallest hump, or if there are two humps closely spaced, the average of the two frequencies.
- Carry some items with you that can drop to mark the positions of the anti-nodes.
- Walk around the room with your head at about the same height as if you were seated and listening.
- You'll find spots where the hum of that bass tone is very strong, and others where it is relatively weak. The strong spots are the nodes, and the weak spots the anti-nodes.
- Wherever you hear an anti-node, drop a marker on the floor. Those will be your candidate speaker positions.
- Hopefully, there are two of those positions that can be used for speaker placement. In our experience, a pair of good ones are likely to appear on the longer wall, near to one end of the room, but not necessarily.
- Finally, listen for a spot or area where you can place your seat, where the hump is also minimal.

By this means, you should be able to knock the effect of the worst mode or pair of adjacent modes down by 10 dB, for instance reducing a monstrous 15 dB hump to a much less noticeable 5 dB.

FUSE

Fuse replacement

The fuse is accessed by liberating the fuse drawer located beneath the power inlet. There are two tabs that can be easily piched and pulled outward. There's a spare fuse at the front of the drawer, along with the working fuse at the back.



Fuse drawer closed



Fuse drawer open



Specifications and Features

- **Frequency response**, on axis, ± 3 dB
 - 30 Hz - 20 kHz in medium to large rooms
 - 20 Hz - 20 kHz in small rooms
- **Maximum continuous SPL** from pair at sweet spot
 - 112 dB in small room at 8' distance [2.5m]
 - 108 dB in medium to large room at 13' [4m]
 - Peak transient SPL at least 6 dB higher
- **Dispersion pattern:** Unipolar: enclosed cabinet eliminates backwave, easy setup compared to other electrostatics
- **Listening area**
 - 20° horizontal dispersion at 15 kHz
 - 6.5' wide at 13' [2m wide at 4m]
 - 4' wide at 8' [1.2m wide at 2.5m]
 - Tight 5° vertical dispersion at 15 kHz
 - Controlled dispersion -- uniform frequency response over a known angle; rolls off rapidly beyond
 - conserves recorded ambience
 - sharpens the soundstage
 - reduces interaction with the room, especially reducing wall splash
 - involves the room enough, however, to avoid in-your-head imaging
- **Remote control:** level, mute, input, preset, on/standby

SPECIFICATIONS AND FEATURES

- **Inputs**
 - Analog
 - Balanced XLR in and through
 - Single ended RCA in and through
 - Digital
 - AES (balanced XLR)
 - Optical S/PDIF (TOSLINK)
 - Coax RCA S/PDIF
 - All have through outputs, except optical sends its through data from coax output
 - Input circuit automatically engages whichever input has a signal
 - Adjustable gain by way of remote control; no effect on resolution or S/N
 - **Crossover:** 2nd order @ 500 Hz
 - Far below the disturbance-sensitive hearing region of 1 kHz - 3 kHz
 - Entire midrange and treble carried by the electrostatic elements
 - DSP (Digital Signal Processing) implementation, which functions exactly according to design intent, unlike complex passive crossovers
 - **Secondary partial crossover** on electrostatics
 - Resistor-only 1st order passive at 5 kHz
 - Limits the upper treble from half the width of ESL panel
 - Controls dispersion and flattens the electrostatic aperture effect roll-up response without an electrical rolloff network
 - **Built in equalization**
 - Idealizes the frequency response
 - Provides three room boundary reinforcement corrections, selected with the remote control
 - Adapts the bass response to a wide range of speaker placements relative to walls, or can be used to boost or cut bass
 - **airLayer feature**
 - High grade, silk ring-dome tweeter mounted on outboard side of each speaker
 - Adjustable level from off to overly loud
 - Its sound is reflected from each near side wall
 - 2nd order crossover at 2 kHz
 - When adjusted to be just slightly on, enhances the sense of spaciousness
 - When adjusted to higher volume, provides extra treble for informal, off-axis listening
-

SPECIFICATIONS AND FEATURES

- **Driver configuration**
 - 2.5 way, WTW (Woofers - Tweeter - Woofers) quasi-line
 - Woofers radiation pattern mates well to electrostatic array
 - Reduces room mode coupling, eases placement
 - Excellent phase alignment for image focus
 - Vertical image stability
 - Minimal floor bounce effect
 - **Electrostatic panels**
 - Two identical panels in each speaker, mounted in a barometrically isolated sub-enclosure
 - Vertical array; 7" x 16"
 - Protected by an integral barrier
 - 80 in² [520 cm²] forward radiating
 - Tough, stable, injection molded stators
 - 66-element, parallel wire, stator electrodes (total of 132 electrode elements per panel)
 - Unique panel construction and materials are immune to the effects of wide and rapid temperature and humidity swings
 - Optimal sonic membrane material
 - Thickness less than 1/15th of a sheet of 20 lb. paper -- lighter than the air it is driving (air load exceeds in-band mass load)
 - Acts as a virtual air driver with force applied evenly over its whole surface -- no breakup, no coloration
 - Properly damped, unlike see-through electrostatics, for most accurate transients
 - No midrange or treble coloration
 - Distortion is far below audibility
 - Will not lose tension or degrade
 - **Woofers**
 - Two identical, 8" [25.5 cm], low mass, long excursion, alloy cone, low distortion, low inductance, high resolution drivers connected in parallel
 - Operate far below their breakup frequencies for nearly ideal piston motion and thus practically no coloration
 - Seamless integration with the electrostatics
 - Strong, accurate bass, not boomy club bass
 - Tight, palpable impact and slam
 - Direct connection to the amplifier eliminates the effects of speaker cables
 - **Enclosure**
-

SPECIFICATIONS AND FEATURES

- Sealed --fast woofer transient response, low group delay, tight integration with electrostatics
- Walls high mass, 1" thick [25 mm], well damped, well braced; negligible vibration
- 2.5" [63 mm] thick, solid hardwood baffle is stable and rigid, yet free of resonances
- Baffle step is reduced by front edge scoops, which are also visually interesting
- Modest backward tilt
 - Maintains time alignment between drivers and thus sharpens image
 - Causes the image to appear above the speakers, not from down on the floor
- **Plinth**
 - 2.5" [63 mm] thick
 - Solid, hard maple, painted to match cabinet
 - Choice of high durometer rubber feet or spikes
- **Amplifiers**
 - Two amplifiers in each cabinet, one for the woofers and one for the electrostatics and airLayers
 - Input impedance (analog)
 - XLR: 44 k Ω , balanced to ground
 - RCA: 54 k Ω
 - S/N ratio
 - 111 dBA Digital input
 - 109 dB Analog input
 - Power (each speaker) 1000W RMS maximum
 - Damping factor: >1500
 - Distortion: < 0.001% (THD + Noise)
 - Frequency response: 10 Hz – 50 kHz, +0/-3 dB
 - Efficiency: 92% at full power – very green
 - Mains power: 17 Watts idle; 220 Watts max.
 - Self-adapts to any mains worldwide
 - IEC cord inlet with power switch and fuse drawer -- uses standard power cords worldwide
 - Fuse: Slow blow; 12A for 120V or 6A for 240V
 - Built-in surge protection
- **Weight** -- 28 kg [62 lbs] each with standard plinth

SPECIFICATIONS AND FEATURES

- **Dimensions**
 - Speaker enclosure: 36" tall x 10.2" wide x 8.9" deep [91 cm tall x 26 cm wide x 23 cm deep]
 - Plinth: 12" wide x 14" deep x 2.5" thick [30 cm wide x 35 cm deep x 6 cm thick]
- Heirloom quality materials and finishes used throughout for lifetime durability, yet all are recyclable
- Designed, engineered, and built in the USA
- Warranty -- 5 years on speaker components, 2 years on electronics, against failures caused by defects in materials or manufacturing
- Modular construction; field repairable
- 3/8" [10 mm] thick wool felt above and below electrostatic panels suppresses edge diffraction
- Appearance options available (custom finishes/paint, custom woods)

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Frequently Asked Questions

Q: How can a digital amplifier have analog inputs?

A: Although the amplifiers in the Valentina are essentially power DAC's, each speaker has a high-grade ADC (Analog to Digital Converter) built in to accept analog signals. Due to the high quality of the ADC, analog sources will not experience degradation of the sound quality. Also, having the ADC incorporated into the amplifier is the best way to ideally conjoin the analog and digital domains.

Q: How do I modify the presets?

A: Hypex makes Windows software available for this purpose, called HFD, for Hypex Filter Designer. In addition to creating presets, you can control many functional aspects of the amplifier with this software.

WARNING: JansZen will not be held responsible for, and the warranty will not cover damage to the amplifiers, signal circuitry, or drivers that may have been the result of parameter changes made by way of HFD. Any such damage that occurs after obtaining a speaker login password from JansZen will be assumed to have been such a result.

The software and its documentation are available for download at:

<https://www.hypex.nl/product/hypex-filter-design/17>.

If you wish to use the existing presets as a basis for new ones, contact us for the project file. Once installed, the HFD software will create a directory called **FilterData** in your Documents directory.

FAQ

Create a folder called **Valentina A8** in the **FilterData** directory and drop this XML file that we sent you in there. You can then open it from the **File** pull-down in the HFD software. After that, it should show up in the **Recent projects** menu.

Once the system is set up, you need only connect the computer through a USB cable to each amplifier in order to reprogram its parameters.

Q: What are your cable recommendations?

A: The Valentina A8 is an expensive speaker, so we understand that it may seem incongruous that optimal connectivity is available at low to moderate cable prices. In fact, we recommend that you be wary of exalted claims for what is essentially wire, and avoid cables that cost more than \$100.

If you contact us, we can make specific recommendations. We will also sell you cables that we have found work well, and then if you're not satisfied, you may return them for a full refund at any time forever.

Since the Valentina A8 can be connected by several types of cable, here are some general notes about each of those:

Digital cables

Digital RCA (coaxial S/PDIF). It's important to use cables meant for digital signals, rather than trying to use audio RCA cables, even though they look the same. Audio cables are likely to work poorly or not at all. This is because digital signals use high frequencies and fast waveform edges that require controlled impedance and transmission line terminations. That said, we've found that even the very cheapest ones (\$5 for a 15 foot cable!) test well, but you'll be safer and probably happier in the long run if the cables are also obviously well made and the wire is flexible and has a nice feel to it. \$15 - \$20 per cable should do it.

Digital optical. Lots of choices here, but all will work fine. A flexible cable with a thicker sheath is easiest and nicest to use. Remember to pull the protective cap off of each end.

Digital AES. This is a cable and communication standard used by studios and other professional end users who need no notes or recommendations.

If you are a home stereo user, however, and wish to have a third digital input, then you can get a converter that will let you connect an optical or coax S/PDIF cable to this input.

FAQ

Analog cables

RCA (single-ended, sometimes called unbalanced). These are appropriate in general for runs of less than 15 feet found in most home systems. In general, the shorter the run, the better.

Very long runs can be problematic, because with some sources, the aggregate cable capacitance can roll off the highs, and noise pickup can become a problem, since noise immunity relies only on shielding, which can't be perfect. On the other hand, long runs can work perfectly well, so if your equipment only has RCA jacks, don't worry about switching to balanced cables and BALUNs unless you notice a problem.

There are bad cables out there that have poor noise shielding, make poor contact with the jacks, have inferior plating, etc., but these problems are rare in cables of reasonable length that cost more than \$15 or \$20.

Look for:

- tight fitment of plugs onto jacks – the contacts will scrape through corrosion or dirt and get a reliable connection without further attention
- gold or rhodium plating (Nickel eventually develops hard, non-conductive oxide, and silver requires periodic removal and re-insertion to stay clean.)
- connectors that you can really yank on hard without pulling them off the wire (Don't be shy, but if buying from a dealer, it would be polite to let them know what you're planning to do to their demo cables, or preferably to those you'll pay for if they pass the test.)
- flexible, relatively thin, and relatively light cabling, so there's no sideways force pulling on the jacks (Big fat cables are a joke among engineers; there's no rationale for them, other than they're what some people want.)
- strain reliefs that appear able to protect the termination from failure after many flexures

Of course, we have no objection to fancy cables, as long as attention to fanciness doesn't interfere with your enjoyment of music or divert money from the purchase of musical media.

One side note: Some equipment has both balanced (XLR) and single ended (RCA) outputs, and for some reason sounds better when the single ended outputs are used. Without receiving an explanation, we've heard agreement about this from one equipment maker, so it's probably not just in our heads.

FAQ

XLR (balanced). If you have runs longer than about 15 feet, balanced cables offer superior noise immunity, while the usually higher current available from a balanced output prevents cable loading from affecting frequency response. They also will not form ground loops.

These cables send a balanced signal over a twisted pair of signal conductors and place a grounded shield over the whole thing, so it's practically impossible for normal levels of ambient RF or magnetic noise to couple into the signal wires, and balanced input circuits reject common mode signals, so ground loops are moot.

It's hard to find a bad balanced cable, because they're most commonly used by studios and in performance venues, which can't afford problems of any kind. These end users will be merciless in their criticism and will boycott low quality items, which will thus not survive long on the market.

This, however, is one case where we will make a specific recommendation for those who want something unassailable, and that is Mogami Gold cables. They're not cheap, but neither are they very expensive.

Q: My source has a volume control that I would prefer to use, rather than the speakers' own volume control. What volume level should I set the speakers to?

A: All the way up. Simply keep pressing the + button on the remote control until you stop hearing increases in the volume.

Q: Is it better to use the remote volume control in the speakers or the one in my source or digital player?

A: That depends on the quality of the alternative volume control, but in practical terms, it won't matter much or at all.

The control in the speakers is implemented in software using 64 bit calculations. This will reduce the S/N ratio at lower volumes, but the resolution will be unaffected.

This is equivalent to most players' volume controls, at least if the player is running on a 64 bit system, which is pretty much universal these days, so there's no reason in that case to prefer one over the other, except that the remote control is usually going to be more convenient.

On the other hand, if your source is a high resolution DAC that controls its volume by way of the reference voltage to the DAC chips, then you will get the maximum S/N ratio

F A Q

by relying on the DAC's volume control, after turning the speakers' volume up to maximum. The difference will most probably not be perceptible, but may be of interest to you, nonetheless.

Q: Is there any point in using a line conditioner or regenerator with these speakers?

A: No. The power supplies in these speakers can adapt instantly to aberrant power line conditions and will filter out line noise as well as anything that could be connected ahead of them. Since they can draw up to 600W each, an outboard power system will be quite expensive with no benefit. Such devices can be beneficial, however, by supplying clean power to source gear that wasn't designed as well.

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Troubleshooting

Problem: One speaker is not making sound.

Causes: There are four scenarios where this can happen.

- 1) If a power interruption has occurred, and possibly under other conditions, the left speaker can come up with its volume set to -96 dB, which mutes it.

Solution: press the red button (power icon) on the remote control to put the speakers into standby, and then press it again to take them out of standby. This will synchronize the left and right volume settings so they are both set to whatever the right speaker had been set to.

- 2) When using the analog inputs, it may seem that you can connect both left and right signals to the right speaker, given that there are two input jacks there, and in the case of the RCA jacks, one is red and the other is white. You may thus expect the system will send the left signal over to the left speaker.

As it happens, however, this is not the case. The digital cable that's required for interconnecting the two speakers carries only digital signals.

Solution: You must connect the right analog RCA or XLR cable to the right speaker, and the left one to the left speaker.

- 3) An outlet or power strip has failed, a cable has failed or is the wrong type (e.g., analog for digital RCA), or a circuit breaker has engaged within a power strip or mains breaker box. We've entertained inquiries that boiled down to all of these, so please don't rule them out as possibilities until you've checked.

TROUBLESHOOTING

- 4) The quiet speaker's fuse has blown. In this case, please refer to the section on page 36 about [fuses](#).

Problem: There's a delay when I start playback before sound comes out of the speakers.

Solution: Please refer to the section starting on page 20 about [input selection](#).

Problem: There's no sound coming from either speaker, even though the green LED is on and both speakers are powered on.

Cause: The input selection was made by way of the arrow buttons on the remote control. This will hard select the input, which isn't matching the current source.

Solution: Press one of the arrow buttons until sound is heard.

There will be two input settings that produce sound: one is auto-detect, and the other is hard selection of the current input.

If you want the speakers to auto-detect which input has a signal, then press the button until there is a brief pause before the LED comes back on and before sound is heard, as opposed to an instant response.

There is more information on this topic in the section starting on page 20 about [input selection](#).

Warranty

LIMITED FIVE YEAR WARRANTY

- I. *Acceptance.* Acceptance of ownership of the merchandise occurs upon acceptance of delivery.
- II. *Shipping damage.* The shipment should be examined for shipping damage prior to acceptance. Shipping damage will not result in cash costs to the buyer.
 1. *Obvious damage.*
 - i. If such damage is discovered, delivery should be refused, so that JansZen may most credibly negotiate with the shipping company.
 - ii. JansZen shall be notified of the event ASAP.
 2. *Occult damage.*
 - i. If after acceptance damage is found that was not initially noted but is attributable to handling in transit, the applicable claims procedures of the shipping/freight company apply.
 - ii. Details of the damage shall be reported to JansZen either verbally, in text, graphically, or photographically, as required to accurately document the damage.
 - iii. At JansZen's sole discretion, the damaged goods may be returned to JansZen for inspection or inspected on site, if this is in accordance with the shipping/freight company's policies.
 - iv. At JansZen's sole discretion, the damaged goods may be repaired or replaced.
 3. *Time frame* – We will make every effort to return the owner's speakers within a four week period. This allows a week for the carrier to do its investigation, a week in transit *each way*, and a week under repair at our plant.
- III. *No defects warranty.* JansZen systems may contain both electronics and acoustical radiators, which are warranted separately.
 1. The speaker elements (acoustical radiators), mechanical parts, and passive electrical parts are warranted against failure caused by manufacturing or material defects for five years.
 2. Any active electronics are warranted against failure caused by manufacturing or component defects for two years.
 3. Systems or components in need of repair or replacement during these periods will be repaired or replaced at no cost to the owner, or the purchase price refunded. JansZen will be the sole determiner of which action is taken.
 4. This warranty covers only non-commercial use of the product.

WARRANTY

5. This warranty does not apply to failures that are the result of violating JansZen recommended or generally accepted maintenance or usage practices, nor to any of the following, including but not limited to: applications and uses for which this product was not intended, for example, outside the home; altered product or serial numbers; cosmetic damage or exterior finish; accidents, abuse, neglect, fire, water, lightning or other acts of nature; severe power fluctuations and surges; failure to follow operating or maintenance instructions.
 6. This warranty applies only to JansZen products sold directly by Janszen or by an authorized JansZen reseller.
 7. JansZen will be the sole determiner of whether a product is indeed defective.
 8. Replaced or repaired units will assume the remaining warranty period or 90 days, whichever is longer.
- IV. *Satisfaction warranty.* If the buyer wishes to return the speakers within 30 days of acceptance for any reason, they may be shipped to JansZen at the buyer's cost in their original condition and packing materials. If there is no damage traceable to the owner, the refund will be in full. If there is such damage, repair costs will be deducted. Shipping damage will be handled in accordance with the carrier's rules and procedures and not affect the refund to the buyer.

V. *Entire agreement.*

THE FOREGOING WARRANTY IS THE ONLY WARRANTY WITH RESPECT TO THE SPEAKERS, AND WE MAKE NO OTHER WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, REGARDING THE DEVICES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL JANSZEN, OR ITS AUTHORIZED RESELLERS BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF SUCH DAMAGES RESULT FROM NEGLIGENCE OR OTHER FAULT.

Registration for warranty.

If you have purchased your speakers directly from JansZen, YOU ARE AUTOMATICALLY REGISTERED FOR THE WARRANTY.

If you have bought them from an authorized dealer or from another owner who has a valid warranty still in effect, REGISTER YOUR PURCHASE FOR WARRANTY by visiting the following web site:

<http://www.TBD.XXX/registration>