



**Your Rocket
ELT-1 Home
Theater
Enjoyment
Guide**

Yours exclusively through

AV123



A Suggestion

Your Rocket ELT-1 home theater system is carefully hand-packaged utilizing molded foam inserts to protect their fine furniture-grade finish. Please use care when unpacking your new speakers. When removing them from the box, hold the wood sides of the cabinet, while taking care not to exert pressure on the front cloth grille.

We strongly recommend that you save the foam inserts and shipping cartons to protect your speakers, should ever need to move or ship them to a new location.

Thank you. And Congratulations!

Our thanks for buying Rocket Series speakers from AV123. We sincerely appreciate your confidence in us and our products.

Although we know these speakers represent extraordinary value, we also know that the real test is how you feel about your speakers several months from now. That's why AV123 will continue to work hard to earn your respect with technical advice and customer service that is second to none in our industry.

You can visit the AV123 website (www.av123.com) at any time for up-to-date product information and answers to FAQ's, as well as seeking advice from the AV123 community at our new online forum (www.forum.av123.com).

Should you require that personal touch, please don't hesitate to contact our support department, toll-free, at (877) 543-7500 option 2. You'll find our knowledgeable Technical Services Department eager and willing to help.

We ask you read this owner's manual first. It contains many tips on getting your new loudspeaker system set up, connected, configured, and performing its absolute best in your unique environment. We hope you find it clear, concise, and useful.

Again, thank you for your support.

AV123

Your Rocket ELT-1 Enjoyment Guide

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The logo for AV123, featuring the letters 'AV123' in a large, bold, stylized font with a 3D effect and a horizontal line underneath.

Introduction to AV123 and your new Rocket ELT-1 Home Theater System



At AV123, our absolute highest priority begins and ends with you, the customer. You can rest assured that if you're not 100% satisfied with your purchase within 30 days from your original receipt

date, you may return your product(s) for a prompt refund in full (excluding shipping charges) with no explanation necessary. Coupled with the expert advice on our website and through our trained advisors, there is simply not a safer way or place to buy today. At AV123, misleading and high-pressure sales tactics have no place. Not only do we give you the tools and the resources to fully evaluate your purchase before your order is placed, we back this up after the fact by allowing you a full month to audition our products in your own home before your final decision is made.

We've done our best to provide you with products and services meeting or exceeding your expectations. However as good as our products are, they do not match our dedication to each and every sale. Should you need any further assistance in the future with your A/V system, you can bet that AV123 will be there supporting and assisting you as you make your way to your next level of audio/visual enjoyment.

The Onix Rocket ELT-1 (Extremely Luscious Theater) is a very potent and agile loudspeaker system. Unlike many all-in-one home theater systems, your ELT-1 has been specifically designed to offer stellar performance for both music and home theater formats. For this reason, the placement tips and suggestions in this manual are vital for proper imaging and soundstaging. Features of your new system include a 200-watt powered 10" ported subwoofer, dedicated 3-way, 4-driver center channel, extremely rigid, high excursion 5.25" alloy cone woofers, and an incredibly smooth and refined hybrid silk-suspended aluminum dome tweeter. We hope you enjoy your new home theater, and thank you again for your support of AV123!

Section 1-Getting Started

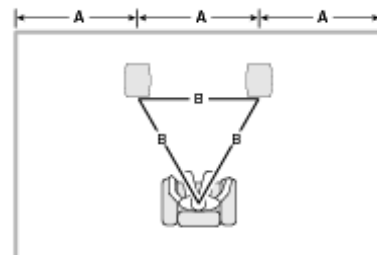
Your new ELT-1 loudspeaker system includes just about everything to get you up and running in a few short minutes. However, listed below are a few things you will need to complete proper installation. Should you have any questions about those items below or where to find them, feel free to call our support staff at any time.

- **Home theater receiver or preamp/processor and amplifier.**
- **An audio source such as a DVD / CD player.**
- **Speaker wire – 16 gauge or lower (larger)**
- **Source Interconnects – A digital coaxial or fiber optic cable and possibly standard analog RCA cables depending on your equipment (if DVD-A or SACD is going to be used, you will need both digital and analog connections. See your player's manual for more information).**
- **Subwoofer Connection – RCA is the most common and preferred connection method from receiver to subwoofer. You will need a single mono RCA cable to make this connection.**

Section 2-Placement

To achieve the best performance your ELT system has to offer, there are several tips, suggestions, and guidelines to follow when setting up your system in its new environment. Details for the most common placement techniques are listed below. However, at the end of this section you will also find more information on placement alternatives in unique situations.

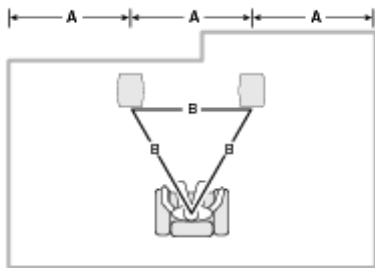
2.1-Front Speaker Placement



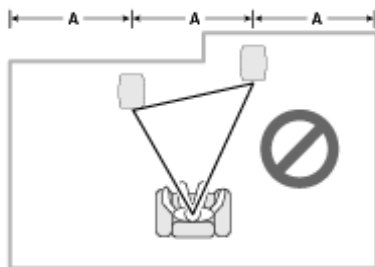
Try to place your main speakers (Left, Center, and Right) along the same wall of your listening/viewing room. Although we've seen successful installations that didn't follow this guideline, they're generally more problematic in terms of system response and accurate theater sound reproduction.

Use the "Rule of Thirds" whenever possible as a starting guide. This suggests that the best placement for your Left speaker is approximately 1/3 of the way along the wall behind your speakers. Similarly, the best place for the Right speaker is usually 2/3 of the way across the same wall. If at all possible, move the speakers out from the back wall. Although all rooms are different, we recommend a minimum wall-to-rear-of-speaker distance of 3 inches. Whatever distance you finally select, use a tape measure to make sure that each speaker is placed at the same distance from the back wall. With that same tape measure, make sure the speaker-to-listening/viewing position is the same for each speaker, too. If there's a conflict here (as would happen with an irregular wall behind the speakers), we suggest that you equalize the distance between front of the speakers and your favorite listening/viewing position. If that places one speaker closer to the wall behind it than the other, don't be too concerned.

In other words, this...



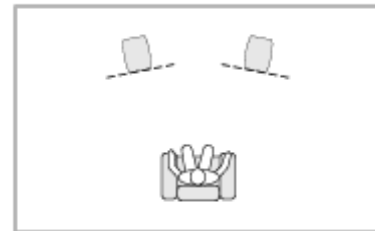
Is generally preferable to this...



Remember that the "Rule of Thirds" is a basic guideline only. Some acousticians recommend placing the main (Left and Right) speakers so that they form an equilateral triangle with the prime listening/viewing position. This is as close to ideal. Notice different distances between speakers and left and right sidewalls. It's worth trying for this ideal, but don't get overly concerned if your room doesn't allow this precision.

Side walls have a major impact on the sound you hear. Ideally, you should not place your main speakers close to them. Remember that the Rule of Thirds" gives you a good starting position, but you should feel free to experiment. Ideally, try not to place your main speakers so they're *exactly* the same distance from the closest side walls. A bit of asymmetry here is actually preferable. *Symmetrical* placement generally results in larger *standing waves* in the room that reinforce certain frequencies and diminish others. This, obviously, is not a good idea. Follow the same guideline with the Right speaker. When you take the time to place your speakers properly, you'll realize better "imaging" (the apparent lateral placement of individual instruments or voices), and more depth or "layering". You'll hear those advantages because you'll be avoiding the aural confusion caused by so-called "first reflections" that complicate our perceptions when speakers are too close to a wall's large, flat, reflecting surface.

2.2 Should you "toe-in" your speakers?

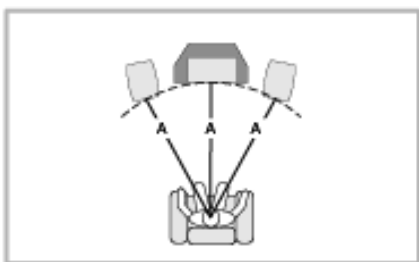


Some people like to "toe-in" their main speakers to get better performance. This simply means aiming both Left and Right speakers so that they point towards the prime listening/viewing position rather than straight ahead. This is how many people aim their speakers. "Toe-in" can improve imaging and add a sense of spaciousness to the sound. In addition to imaging improvements, toe-in can also change your speaker's tonal balance (or timbre). For that reason, you may want to play with toe-in to get the most out of your speakers. Some time experimenting here can yield a better match to your room's acoustic properties, provide a clearer, more precise center channel speaker, or just better suit your own listening preferences. Enjoy!

2.3 Center Channel Speaker Placement

Place your center-channel speaker between your Left and Right speakers as close to your TV

screen as possible. Try to keep the tweeters of all three speakers (Left, Center, and Right) as close to the same height from the floor as possible. If the tweeters are at - or very close to - on-axis with your ear level when you're seated, you're doing very well indeed (this may pose a challenge if you're placing a single Center Channel speaker either above or below the screen. Try aiming the Center Channel slightly down or up to compensate). It's a good idea to place the Center Channel speaker at exactly the same distance from your listening/viewing position as the main Left and Right speakers. This will ensure the sound from all three front speakers arrives at your ears at the same time. This will help to create the most convincing image (yes, some surround receivers and processors have circuitry that can compensate electronically for different distances but we feel it's always good to start mechanically rather than electronically if possible).



2.4 Surround Speaker Placement

Surround speaker placement is a bit more challenging. Ideal placement can either be on the back or side walls of your listening/viewing room depending on how the system will be used. Regardless of exactly where they are placed on either wall, make sure to locate them above ear level. Try not to place furniture between your speakers and your listening/viewing position. You have every right to expect a high level of sound quality from your Rocket ELT Series speakers. Make sure you can see them when you're ready to enjoy some music or a movie!

2.5 Alternative Speaker Placement Options

We realize that the real world (family opinions, room traffic patterns, etc.) will have more impact on where you place your Rocket ELT Series speakers than any academic discussion of a room's acoustical properties. That being said, following are some guidelines you might find

useful as you scout out possible locations.

1. Shelf mounting: Logically, this may be your first consideration. That's fine if the shelf is sturdy enough and deep enough to hold your speakers securely. Remember, a shelf that is up against a wall should be at least 2" deeper than the speaker itself to allow for cable connections and port "breathing" room. So, since your ELT speaker is 7.5" deep, you will need to allow a minimum 9.5" of shelf space. Note that the Rocket Series speakers are bass reflex enclosures with a port on the rear panel. Because the port is very important for proper bass reproduction, please do not block it. In fact, if you're shelf-mounting your speakers, try to leave at least 3" to 6" of open space behind the rear panel. **Note:** these instructions are for *open* shelves. Mounting your speakers on "enclosed shelves" as would be found in an entertainment center or built-in cabinets can affect bass response substantially.

For shelf mounting, use the adhesive rubber feet provided or a moldable, reusable adhesive such as BluTack or other "earthquake wax." If you elect to use the rubber feet, simply peel them from the protective sheet and apply them close to the corners of the speaker bottom. Be sure the shelf itself is firmly in place and there are no loose items on the shelf to rattle or buzz while the speaker is playing. Again, BluTack or similar is great for securing and dampening your speakers.

2. Stand mounting: If you're placing your Rocket Series *bookshelf* speakers on stands, you have several options:

- a. You can use the rubber feet on a speaker stand, but this may be risky if there is a chance the speaker or stand may be bumped and the speaker knocked off.
- b. You can use a material like BluTack to keep your speakers firmly (but not permanently) attached to the stands. If you can't find BluTack, just ask your neighborhood hardware store for the generic equivalent or some "earthquake wax."
- c. We do not recommend the use of double sided foam tape or other strong adhesives to secure your speakers to a stand, as they will damage the furniture grade finish if and when removed.

No matter how you mount your speakers to the stands, make sure you follow the instructions supplied with the stands and try to keep stand-mounted speakers out of the major traffic paths in your room just as you would with floor-standing speakers.

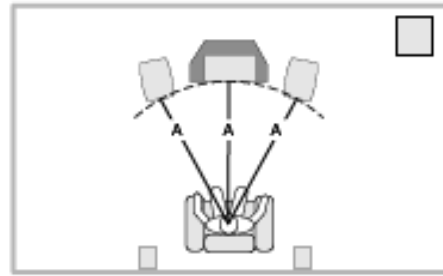
3. Wall mounting: Although proper wall mounting usually requires more effort than shelf or stand mounting, it is often the most practical since it positions the speaker safely out of room traffic patterns.

We like Vogel (www.vogelsusa.com), Haropa (www.haropa.com) and OmniMount (www.omnimount.com) mounting brackets, although there are others that will work well. When you shop for brackets you'll find different models which allow you to mount to a wall, ceiling, or cabinet top, allowing for a great deal of flexibility.

A word of caution: Make sure that the brackets you select are strong enough to hold your speakers securely. Pay attention to the bracket manufacturer's recommended weight limit. In fact, we recommend adding a little "fudge factor" for safety's sake. If your speaker weighs 25 pounds, for example, look for a bracket rated for 30 pounds or more. Follow the bracket manufacturer's instructions carefully as you attach it to the wall. Make sure it is *firmly and securely* mounted. You should mount into the studs in the wall themselves as a first option. If this is not possible, a 50 lb dry wall anchor will also be suitable. Extra effort here is well worth it. An inadvertent fall will damage your speaker as well as anything under it! If you're in doubt about how best to do this, please call a qualified carpenter or contractor to help. *Note: If you're considering brackets, we can help! Just call your AV123.com representative and let him or her know what you need.*

2.6 Your ELT SW-10 Subwoofer Placement

Unlike most all-in-one home theater systems, your ELT-1 includes a true 200W powered 10" subwoofer for wall-rattling bass. Because subwoofers play a frequency range few other speakers can handle, setup, configuration, and placement for this speaker is different from that we've just finished explaining.



Unlike regular loudspeakers, subwoofers work very well when placed in a corner - even if a few feet to the side and/or behind the closest main speaker. Try your front right or left corner first. The driver can be facing you or be pointed along either wall. The lower frequency sound waves emitted by the SW-10 are quite long and will therefore interact greatly with the walls of your room, so consequentially even small placement adjustments can make noticeable alterations to the sound you hear. A room corner will provide maximum output for a given power level.

Low frequencies tend to be non-directional so if your subwoofer is placed and calibrated well, you should not be able to easily localize it. Factors that can affect performance in this regard are rattles from walls or nearby objects, or distorted output. If you are having issues with being able to locate where the bass is coming from, try to isolate rattling or buzzing objects if any, or try the other corner in your room. If the sub's output is distorted, check to see that you are not at the maximum sub level setting on your receiver. This can induce audible distortion, so you may need to turn down the subwoofer level on your processor and turn the level up on the subwoofer to compensate. **Note:** *Subwoofer placement in the back of the room can provide good results, but we find the most natural sound in most rooms is obtained with placement in front of the listeners.*

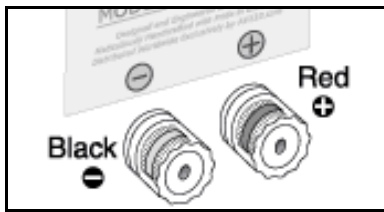
...One last note.

Although the advice in this section will certainly help you enjoy the best possible sound from your Rocket ELT Series speakers, you might want an even fuller exploration of how rooms and speakers interact. If you do, we suggest beginning with F. Alton Everest's *The Master Handbook of Acoustics* (McGraw-Hill). Currently in its fourth edition, this is THE source for anyone who wants to understand more about this fascinating topic.

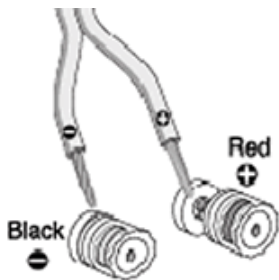
Section 3-Making the Connections

Now that you've got your speaker placed properly, it's time to connect them. *Before you begin connecting your speakers, turn your system components OFF. That way, you won't run any chance of "shorting" your amplifier and possibly damaging it as you're hooking up your speakers. And remember to turn your system back on... then you're done! No, we're not being funny here. You'd be amazed how many people forget that little step!*

3.1 Connecting Your Speakers



All Rocket ELT Series speakers feature a single pair of heavy-duty binding posts for connecting the speaker cable from your amplifier, each composed of a red binding post (positive or "+") and a black binding post (negative or "-"). Each terminal is a "four way" binding post that will accept bare wire, or wire terminated with pins, spade lugs, or single banana plugs. ELT binding posts do not accept "dual bananas," a concession to the safety standards in force for our European customers.



If you choose bare wire, pins, or spade lugs, simply unscrew the terminal's end cap (the piece with the red or white stripe on it) to expose the hole in the center of the shaft. If you're using bare wire connections, make sure you've properly prepared the wire first. Expose about 3/8" of each conductor by stripping the insulation with a wire stripper or sharp knife. (BE CAREFUL, please!) Make sure you twist all the individual strands of each conductor together before you insert the end into the hole in the shaft. Then tighten the end cap down over the wire so that there's a firm connection.

For pin and spade lug connections, follow the same general guidelines. If you're attaching pins or spade lugs to your speaker cables, read the instructions supplied with the termination you've chosen. Make sure that you don't leave any loose strands of wire exposed as you're attaching the pins or lugs. If you're using pre-terminated wires, the manufacturer has already taken care of this potential problem for you. With a pin termination, unscrew the end piece, insert the pin through the shaft hole, and tighten carefully. If you're using large spade lugs, unscrew the cap and place the lug so that it straddles the entire shaft. If you're using a smaller lug, you'll probably have to insert one leg through the shaft hole. In either case, tighten carefully and you're done. With banana connectors, you don't have to unscrew the connector's end cap. Simply insert the banana plug into the hole on the end cap's rear surface.

A Question of Polarity

If you're like most of us, you'll simply run speaker wire from the appropriate output of your receiver to the connectors on each speaker. However, you need to observe the proper *polarity* as you connect your components. This simply means that you should connect the positive terminal on your receiver or amplifier (may be marked "+" or be colored red) to the positive terminal (red) on your Rocket ELT Series speaker. Then connect the negative terminal on the amplifier ("- " or black) to your speaker's negative (black) terminal. *Don't worry about damaging anything if you inadvertently make a mistake here. Sound quality will suffer but you won't ruin anything.* We'll explain this further in below.

If you're still concerned about the procedure, here are step-by-step instructions for connecting the Left front output from your receiver or amplifier to the Left front speaker.

1. Locate the Left front speaker output on the receiver or amplifier. Note that there are two connectors - one marked "+" (the positive terminal - usually red in color) and one marked "-" (the negative terminal—usually black).
2. Look at your speaker wire. You'll see that it has two different conductors. If the insulation is clear, the conductors themselves may be of different colors - silver and cop-

per are the most common. If you can't see the conductors themselves, look closely at the insulation. You'll notice that the insulation over one conductor is different than that over the other conductor - one will have slight molded ridges in it, the other will be smooth, for example. Choose one of the conductors to carry the "+" signal. It really makes no difference which one you pick. *Just be consistent!* **Note:** *Some specialized speaker cables are already marked to avoid confusion but if you're using common "zip cord" (lamp wire), we suggest that you designate the copper colored conductor or the one with the molded insulation over it as "+". As we've already said, consistency is far more important than which conductor you choose.*

3. Connect the "+" conductor to the "+" terminal on the amplifier.
4. Connect the "-" conductor to the "-" terminal on the amplifier.
5. At the speaker end of the same wire, connect the "+" conductor to the "+" terminal on the speaker.
6. Similarly, connect the "-" conductor to the "-" speaker terminal.
7. Follow steps 1 through 6 for all other amplifier - speaker connections in your system.

Why are we placing as much emphasis on consistency here? That's simple. We want you to get all the performance you pay for. When your amplifier-to-speaker connections are consistent, when "+" is always connected to "+" and "-" is always connected to "-", your speakers are said to be connected "in phase." That means the drivers (the active elements that produce sound) in each speaker will push out when they get a common positive signal from an amplifier and will pull in when they get a negative signal. When all the speakers in your system are "in phase," all the cones work together to give you the sound the original artists and engineers intended you to hear.

When speakers are connected "out of phase," the drivers fight each other - some move out while others move in. The result? You'll get less bass and blurred imaging. That's a pretty heavy price to pay for not taking just a few extra seconds to make sure your connections are correct.

Don't Over Tighten!

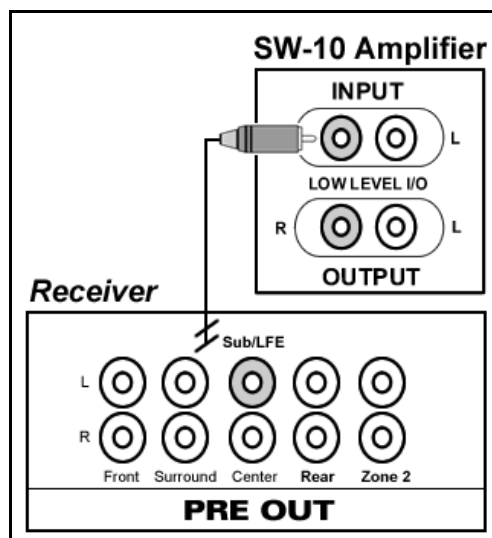
Be careful when tightening the connector's end caps. Although logic may seem to indicate that compressing the wire as much as possible will result in better signal transfer from amplifier to speaker, it doesn't. A firm mechanical connection is obviously better than a loose one. But don't go overboard. If a gentle tug on the speaker wire causes it to move inside the post, you probably need to tighten things up just a bit. But don't think you need a connection tight enough to let you swing the speaker by the wires! In fact, you can strip some connectors by over-tightening them. We've designed Rocket Series connectors to minimize this concern but we still caution against over-tightening.

3.2 Connecting your SW-10 Subwoofer

Because your subwoofer is a self-powered speaker, that runs off the built-in 200W amplifier (as opposed to your A/V receiver's internal amplifiers), it requires a different connection from your speakers.

Make sure the subwoofer is not plugged in and the rest of your system is turned off before proceeding.

When making your connections, be sure to use a high quality and reliable Mono RCA interconnect cable. It should be well shielded and long enough to do the job, but not excessively long—though it is likely to be the longest interconnect in your system. The simplest and recommended connection is from the sub/LFE output on the back panel of your receiver directly to either L or R RCA input on the SW-10.



Section 4-Features and Functions of Your ELT SW-10 Subwoofer

Your ELT-1 system includes an incredible 10" front ported 200W subwoofer for thundering bass response. This sub has several features you won't find in other subwoofers at even 2-3 times the price. These features, and their use is explained in the section below.

4.1 Control Panel Features of Your SW-10 (see figure on next page)

1. **Power switch**
2. **AC Voltage** – Use only when traveling to a country that uses a different voltage than standard.
3. **Power Cord** – A standard IEC socket allows removal of the power cord.
4. **Phase** – This controls the phase of your subwoofer relative to the rest of your speakers. Rotate this dial in small amounts while you listen at your listening position to achieve the best in-room response.
5. **Frequency Adjustment** – This controls the high-frequency cut off. Generally this is set to 80 Hz if used. We will cover this in detail later in the manual.
6. **Level** – This control allows you to match the output of your main/satellite speakers to the sub. Set this to the lowest level when you power your system for the first time, then try setting the gain at 1/4 of max to begin calibrating your system. It's good to have some room for adjustment, so try to keep from having either the subwoofer's gain or the subwoofer level in your receiver or pre/pro up near it's maximum level. This will also minimize the potential for a distorted input signal.
7. **Audio Inputs (RCA)** – Use standard RCA type cables. If your receiver has only one sub out, use either L or R. Both do not have to be used but a Y-cable can be used to gain an additional 3 db of output. If your receiver has two sub outs, it is OK to use both.
8. **Audio Outputs (RCA)** – If your receiver has no sub out, a 'tape loop' can be used if present. You can also connect a pair of powered speakers.
9. **Speaker Input** – This is only used if you have no sub out but have an extra set of speaker terminals.

4.2 SW-10 Setup

Though relatively "plug and play" the following information will help you configure your ELT SW-10 properly in your new home theater environment.

Rubber and Spiked Feet



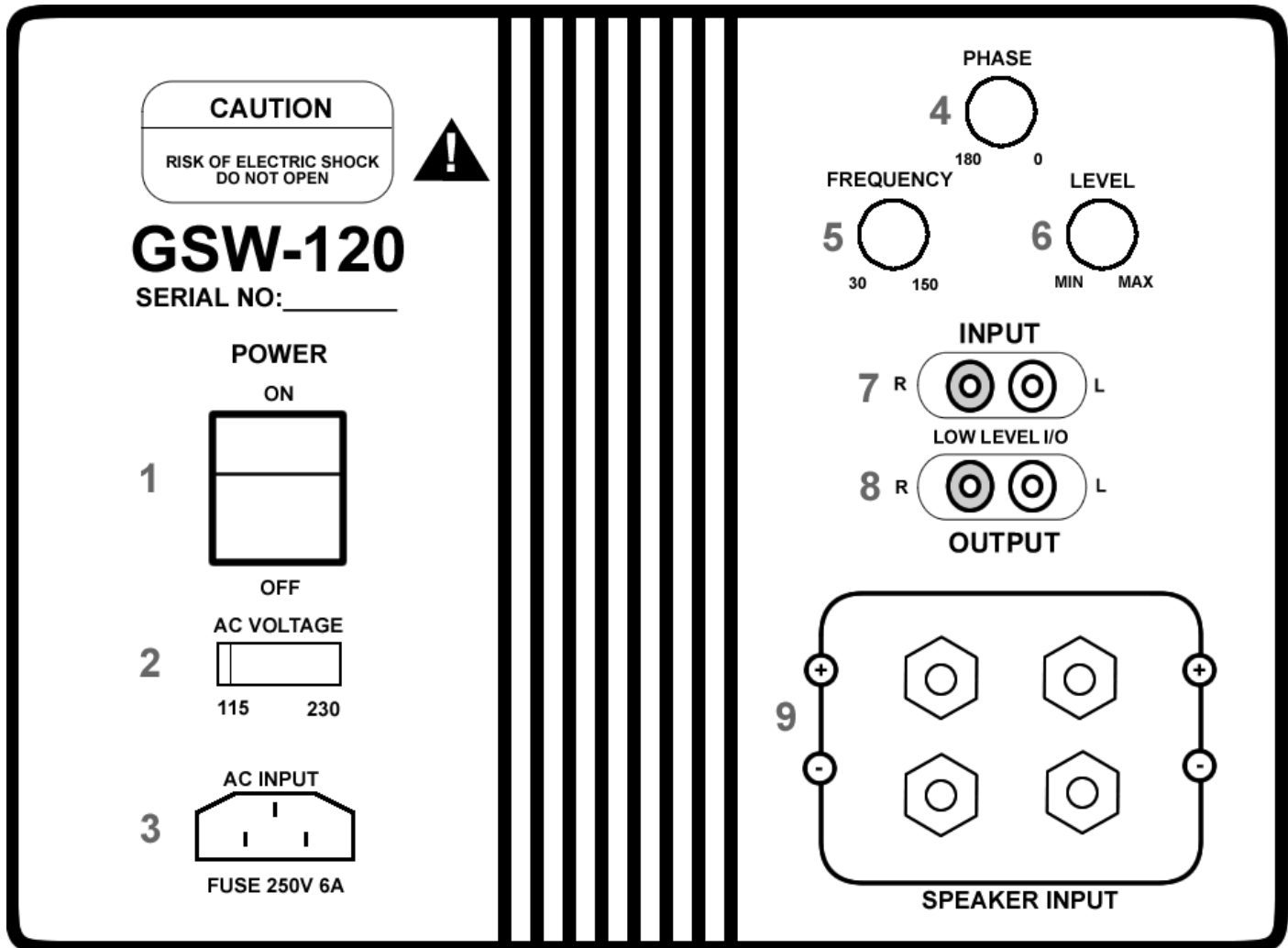
Attach the rubber bumpers included with your subwoofer to keep from marring any hard surfaces. Thread the screw through the large hole in the base of the rubber foot and attach via the pre-drilled holes in the bottom of your SW-10. Please be careful to not over tighten.

If used on carpet, we've also included audiophile quality brass spike feet. Simply screw them into the threaded inserts on the bottom of your SW-10. If your floor is not level, adjust the spikes accordingly to level the sub.

Note: *You may notice a bolt sticking out from the bottom of the sub – this is to hold the SW-10's extremely large power transformer in place within the sub and should be there.*

Phase

The phase dial controls the relative phase of the subwoofer to best reinforce the other loudspeakers in your system. With SPL meter in hand or better yet on a tripod, play an 80 Hz tone (or wherever your cross your mains to the sub) and slowly rotate the phase control starting from "0". When you here the loudest response, you've found your optimum setting. This indicates the least possible amount of cancellation between your mains and subwoofer.



Frequency

As shown in the figure above (please see item # 5) your SW-10 subwoofer includes a continuously variable crossover adjustment built directly into the amplifier. This low-pass filter will allow you to limit the frequencies at which the subwoofer will produce an audible response. The number selected with this dial is the *highest* the subwoofer will play. Thus, for example, if set to 80 Hz your subwoofer will play ONLY 80 Hz information and below, regardless of what it is receiving. If used with a home theater processor or receiver, we recommend bypassing the SW-10's crossover (set to its maximum 150 Hz value) and using the electronic crossover built into your components.

Cheater Plug

A three-prong to two-prong adapter also

known as a cheater plug is included with the SW-10. Try plugging in your subwoofer without this adapter first. If your subwoofer buzzes or hums while NOT receiving a signal, *then* try the cheater plug. This hum is caused by a ground loop. The cheater plug will lift this ground and eliminate the interference. **Note:** *Do not utilize the small metal tab on the adapter, as this will effectively ground the system.*

Port Plug

Generally speaking, porting a subwoofer will allow the speaker to play louder and lower, with a smaller cabinet volume. Sealing this port with the included foam plug will tighten up the sub and make it more accurate, tuneful, and refined, though at the sacrifice of total output and extension. If your sub sounds overly boomy or undefined in your listening area, we recommend the use of this plug on both music and home theater listening.

Section 5-Setting Up Your Receiver

Though much of this information may also be found in your receiver manual, the guidelines below are specifically for your receiver to ELT-1 speaker connections, and should be followed for best performance.

5.1 Simple Calibration

First you'll need an SPL meter. Radio Shack sells an analog meter that works very well for this purpose.



Set the meter on 'slow' and 'C' weighting. The dial should be set at either 70 or 80 depending on your pre/pro or receiver's test tone level. Consult your owner's manual to determine what reference point your unit uses (most use 75, so the 70 setting on the meter would be appropriate).

Let's start by setting the level of your sub to match the rest of your speakers.

From the receiver's speaker calibration menu, set the subwoofer level to 0 dB. Start with the gain on the subwoofer at about 1/4 max.

In the speaker configuration menu (as a part of the set-up on your HT receiver), be sure all your speakers are set to "small" with subwoofer to "yes". The crossover should be set to 80 Hz or 100 Hz. Experiment with what you prefer. Typically, higher crossover settings are used for systems in extremely large rooms or with very demanding low-end material.

Set the volume control on your receiver to the "00 dB" level. See the note below if your unit uses a positive number scale for volume instead of a minus-to-plus scale.

Ensure that all main, center, and rear channels are calibrated to the reference point using your test tones, then direct the tone to the subwoofer. Adjust its level using the gain control on the subwoofer itself until it reaches the SPL level used for the other speakers. An assistant will be very helpful for this process. Some like to run their sub "hot" for movies by increasing the sub level by 5 dB or so above the main channel level. This can be very effective at lower listening levels,

but be sure to use care when watching that big action movie for the first time! Especially at or near reference levels. Once the subwoofer is calibrated, small adjustments can be made easily using the subwoofer level control in your processor/receiver. If you find the need to go much above +2 or +3 consistently, we recommend adjusting the gain control on the sub upward instead and using a lower number for reference level* on the processor.

Note: If your unit does not use a minus/plus volume scale, activate the test tones and increase the volume of your pre/pro or receiver until it reaches 75 or 85 dB on your SPL meter. Remember this number as this will be "reference level"*. Remember to check with your unit's manual to determine if they use a 75 or 85 dB test tone.

***What is "Reference Level?"**

Reference level allows for peaks of 105 dB from the speakers and 115 dB for the LFE (low frequency effects) channel. When calibrated as above, the correct relative volume of each speaker is as the director/sound engineer of the film intended.

5.2 Setting "Small" or "Large"

Like many things audio related, this is somewhat subjective, but it's also a function of your room. By a good majority, most rooms will obtain their best sound with all speakers set to "small" with the receiver's internal crossover setting engaged at 80 Hz. This is assuming a high performance subwoofer, as a good sub ideally placed will handle sub-80 Hz information better than "most" loudspeakers in "most" rooms. This is mainly due to the tendency for competing sources of information below 80 Hz that result in destructive bass wave cancellation, thus effectively eliminating the amount of total information you hear at the listening position. However, in addition to the greater overall output, an 80 Hz crossover setting will allow your other loudspeakers to play with greater ease and less distortion— free from the demands of deep and complex sub-80 Hz waveform reproduction. Your speaker system amplifier will see some benefit as well, since much of the stress of producing deep bass will be eliminated, and handled solely by the integrated 200W amplifier featured in your SW-10 subwoofer. Consequentially, your front loudspeakers will sound cleaner and more controlled.

The easiest way to test different methods and frequencies for crossing over your subwoofer is by using bass sweeps from the "*AVIA Guide To Home Theater*" DVD. Specifically, the tones that descend in frequency from the individual satellite speakers to the subwoofer are quite useful and effective. Using your SPL meter, watch for the smallest amount of overall needle fluctuation while you direct and descend the tones from speaker to subwoofer going around your system.

Section 6-Proper Care and Feeding

Your system should now be fully set up, and configured for optimum performance in your room. We hope this information has been straightforward and easy to follow. However, should you have any further questions or concerns that have not been addressed in this guide, please feel free to contact our support team at any time. You may either call us at 877-543-7500 or simply e-mail us at support@av123.com.

6.1 Speaker Grilles...On or Off?

The grille assemblies for all Rocket speakers have been custom-designed to have negligible effect on performance while affording some protection from inadvertent indiscretions of wayward children or adults with an uncontrollable urge to poke at your drivers, curious pets, and some low-level environmental hazards (such as dust). While Rockets sound good and look good with the grilles on, you may prefer listening to and looking at your speakers with the grilles removed. Go right ahead. There is certainly no performance penalty in doing so.

6.2 Some Advice on Speaker Wire

Your Onix ELT Rocket Series speakers are already wired internally with high quality Onix cable. That's one of the reason they sound as good as they do. Why not extend that performance advantage even further by using Onix speaker cable between your amplifier and your new speakers? You'll find several types of Onix speaker cable on the AV123 web site. We'll be glad to advise you on the best match for your system. And, as a new Onix Rocket Series speaker owner, you're entitled to courtesy pricing on your cable choice. Just call us. If you're satisfied with regular "zip cord" (the typical lamp wire you'll find in hardware stores), please use 16 gauge wire if your amplifier-to-speaker runs are under 50 feet. For longer runs, we strongly suggest 14 gauge.

6.3 Speaker Break In

Many audiophiles believe a component's sound quality improves with use. With speakers in particular, this belief has basis in fact. With Rocket ELT Series speakers, you'll notice an improvement in timbre, responsiveness, and sheer musicality during the first few weeks you use them. That's because, like all electro-mechanical devices, the drivers, especially the suspension elements that keep everything properly centered as they move in and out to produce sound, "settle in" with use. How long should you wait until your Rocket ELT Series speakers are ready to sing? That depends on the kind of music or movie soundtracks you play and the volume you feel comfortable with. If you regularly listen to AM radio at low volume, give your products about 100 hours to get comfortable. If, on the other hand, you favor orchestral music at levels you'd experience at Carnegie Hall, you won't need that kind of patience.

6.4 Speaker Care

Your Rocket ELT Series speakers don't need much maintenance. Dust them occasionally. The durable matte finish on the wood veneer requires only some dusting or it can be wiped off with a water-damp, soft cloth. Please do not try to push in the drivers with an aggressive finger! In fact, the tweeters are somewhat fragile so they should not be touched. Above all, listen and enjoy! That's what your Rocket ELT Series speakers were designed for. And why AV123 takes such pride in bringing them to you!

6.5 Stay in Touch!

Remember that personalized tech support is only a phone call away. Call USA toll-free (877) 543-7500, or worldwide (303) 543-7500. Whether you need our help, or you have some suggestions to make Rockets even better, or you simply want to let us know how much you are enjoying your new speakers, we encourage you to get in touch with us. We like hearing from our customers. For the latest information on the entire Rocket line or to register your new speakers, please visit us online at www.av123.com.

Section 7-Specifications and Your ELT-1 Warranty

7.1 AV123 Warranty Policy and Registration

All products sold through AV123 carry a limited manufacturer's parts and labor warranty. All Rocket Series loudspeakers are guaranteed to be free from manufacturer's defects for a period of one year from the date of purchase.

Get an extra two years of warranty coverage free!

When you go online and register your product, we will extend the warranty by an additional two years - that's three years total.* This extended warranty is free simply for registering within 60 days of your purchase. We urge you to take advantage of this offer. Warranties apply to the original owner only and are non-transferable. AV123 will exchange all defective merchandise, including shipping charges to the original shipment destination, at no charge for up to 60 days after the date of purchase. After 60 days the product must be returned to AV123 for repair only and return shipping costs are the responsibility of the customer. All questions should be directed to customer service.

**All electronics are guaranteed for 2 years. This includes the SW-10 amplifier in the ELT System.*

7.2 Specifications

ELT LRS Satellite

System: LRS Satellites - 2-Way, 2-Driver, rear-ported enclosure.
Drivers: custom 5.25" long-throw aluminum cone woofers, hybrid silk-suspended alloy dome tweeter
Crossover Point: 3.8 kHz
Frequency Response: 65 Hz to 20 KHz (± 3 dB)
Impedance: 8 Ohms nominal
Efficiency: 89 dB (@ 1 watt / 1 meter)
Power Rating: 25-150 Watts power handling
Dimensions: 11.5" H x 6.75" D x 7.5" W
Weight: 12 lbs each; ship weight = 25 lbs.
Finish: Russian Baltic Birch with custom Cherry stain

ELT Center

System: 3-Way, 4-Driver, rear-ported enclosure.
Drivers: custom 5.25" long-throw aluminum cone woofers, custom 2.5" paper composite midrange, hybrid silk-suspended alloy dome tweeter.
Frequency Response: 60 Hz to 20 KHz (± 3 dB)
Impedance: 6 Ohms nominal.
Efficiency: 87 dB (@ 1 watt / 1 meter)
Power Rating: 25-150 Watts
Dimensions: 7.75" H x 6.75" D x 20" W
Weight: 20 lbs. each
Finish: Russian Baltic Birch with custom Cherry stain

ELT SW-10 Subwoofer

System: 200W Powered 10" long-throw woofer, front-ported enclosure.
Drivers: Custom 10" paper-composite long-throw driver
Crossover Point: 40 Hz - 140 Hz
Frequency Response: 28 Hz to 150 KHz (± 3 dB)
Power Rating: 200 Watts
Dimensions: 19" H x 11.75" D x 14.25" W
Weight: 50 lbs.
Finish: Russian Baltic Birch with custom Cherry stain

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Thank you for supporting AV123!