

YOUR ROCKET ULW-10 SUBWOOFER ENJOYMENT GUIDE

Yours Exclusively Through **AV123**

ULW-10

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A Suggestion

Your Rocket ULW-10 Subwoofer is carefully hand-packaged utilizing molded foam inserts to protect its fine furniture-grade finish. Please use care when unpacking your new subwoofer. When removing it 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 you ever need to move or ship them to a new location.

Thank you and congratulations!

Our thanks for buying a Rocket Series subwoofer 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, answers to FAQ's, or to seek advice from the AV123 community at our online forum (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 subwoofer 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.

Introduction to AV123

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 original date, you may return your product(s) for a prompt refund in full (excluding shipping charges), no questions asked. There is simply not a safer way to buy. At AV123, misleading and high-pressure sales tactics are a thing of the past. Not only do we offer you the tools and resources necessary to fully evaluate your purchase before the order is placed, we'll back each and every sale after the fact with our in-home trial period.

We've done our best to provide you with products and services that exceed 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.

Your new Rocket ULW-10 Subwoofer

The Onix Rocket ULW-10 (Ultra Linear Woofer) is a very potent and agile subwoofer.

Special care and attention was given to the ULW to ensure clean, accurate, and extremely detailed low-end performance in both music and home theater systems. Features include a 350-watt amplifier, single band Subwoofer Optimization System, adjustable crossover, and infinite phase adjustment for easy in-room placement. This flexibility will result in a seamless blend with all Onix loudspeakers, as well as those from other manufacturers.

YOUR ROCKET ULW-10 SUBWOOFER ENJOYMENT GUIDE

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Included in box:

- Subwoofer
- Powercord
- Microphone
- Brass spikes
- Brass discs

SECTION 1—PRODUCT OVERVIEW

1.1 Control Panel Features

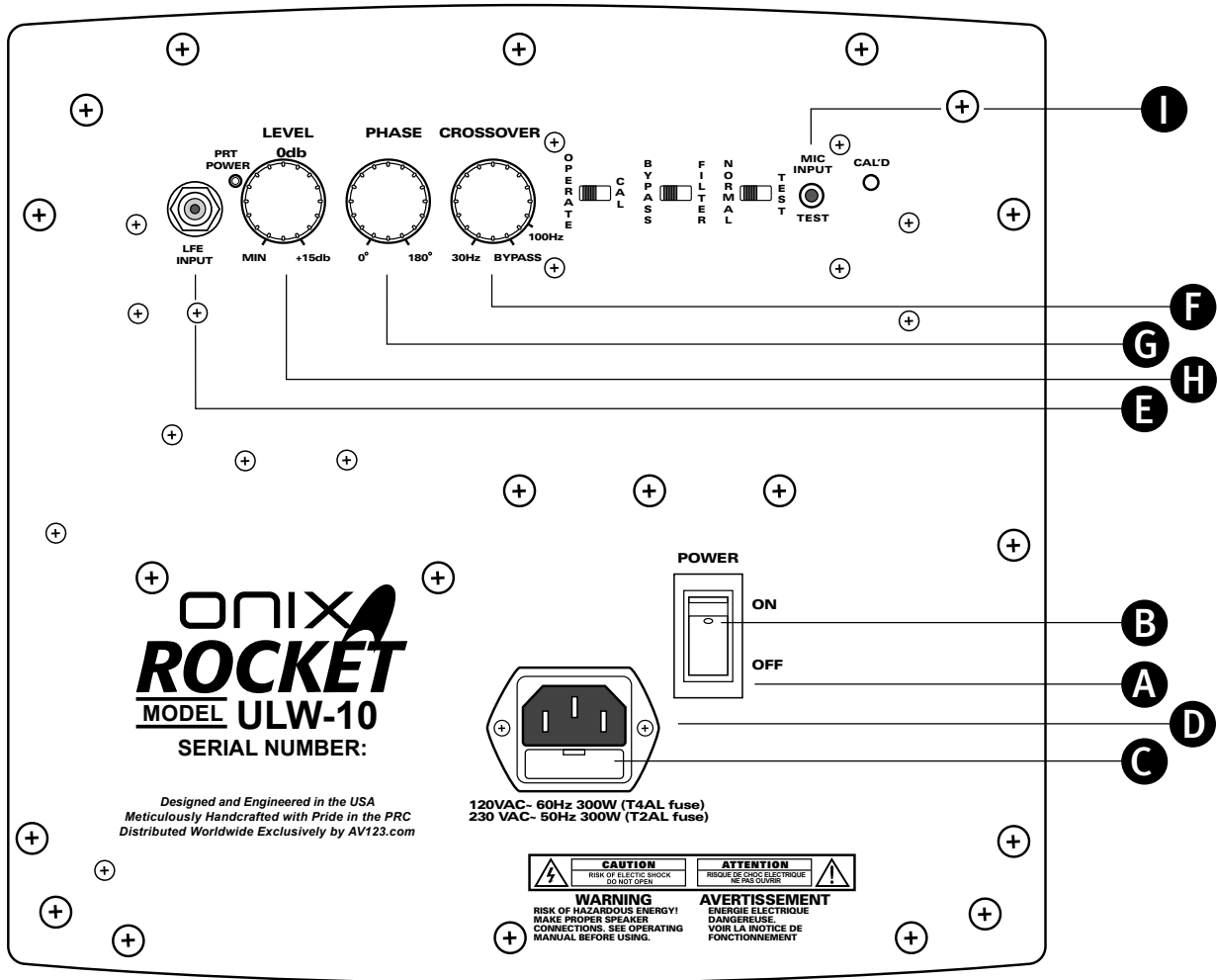


figure 1.1

ULW-10



SECTION 1—PRODUCT OVERVIEW

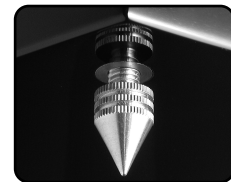
1.1 Control Panel Features *(see figure 1.1)*

- A. **Power switch**
- B. **Power On Indicator** – Glows brightly when the unit is on. Glows dimly when unit is in standby. The unit will automatically turn on in the presence of an audio signal. Approximately 15 minutes of signal absence will cause the subwoofer to go into standby mode. To fully turn off the unit, please unplug it from the wall.
- C. **Line Fuse** – The ULW-10 is equipped with a 4-amp fast blow fuse. Note that for 230V operation, flip fuse holder over and replace fuse with 2amp rating. Always replace with the same rating.
- D. **Power Cord Inlet** – A standard IEC socket allows removal of the power cord.
- E. **Audio Input** – Standard RCA (unbalanced) type cables will work here.
- F. **Crossover Adjustment** – This controls the high-frequency cut off. Generally this is should be set to 80Hz if used, or bypass if not. We will cover this in detail later in the manual.
- G. **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 for the most bass.
- H. **Level** – This control allows you to match the output of your main/satellite speakers to the sub. Set this to the lowest level when powering your system for the first time. When calibrating your system, do not exceed 75% gain. You will want to allow for adjustment. Avoid setting gain levels near maximum either in your receiver's channel-trim menus or on your subwoofer's amplifier. Avoiding doing so will also minimize the potential for a distorted input signal.
- I. **EQ** - SOS automatic parametric EQ. SOS is covered in detail in section 4.

1.2 BRASS FEET, DISCS, AND RUBBER FEET

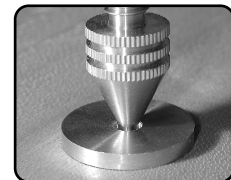
Spike Feet

Included with your Rocket ULW-10 Subwoofer are the same high quality threaded spike feet used on all Rocket Loudspeakers. For carpeted floors, simply screw the spikes into the threaded inserts located on the bottom of your ULW-10 Subwoofer. On uneven surfaces, use these feet to help compensate.



Brass Discs

To protect your hard flooring surface, we have also included metal discs to provide a contact point between your speaker spikes and the floor. To use, simply place the disc under the spike such that the small indentation is aligned with the point of each foot.



Rubber Feet

As an alternative to both methods above we've also included soft self-adhesive rubber bumpers with your ULW-10 Subwoofer. These provide a safe alternative to the metal spikes, and will also absorb any vibrations between the subwoofer and underlying surface. The choice is yours for preference and practicality, but you'll find the results to be very good either way.



SECTION 2—SUBWOOFER PLACEMENT AND LOCATION

2.1 Subwoofer Placement

Unlike regular loudspeakers, subwoofers will often work best when placed in a corner, even if located a few feet to the side and/or behind the closest main speaker. Typically the front right and left corners sound the most natural, though rear corner placement is also an acceptable option. The driver can be facing you or be pointed along either wall. The low frequency sound waves emitted by the ULW-10 are quite long and will therefore interact greatly with the walls of your room. As a result, even small placement adjustments can have a significant impact on the sound you hear. A room corner will provide maximum output at a given power level, and the maximum number of room modes will be excited, translating to a flatter response in most rooms. Often, one rather large peak in the subwoofer's operational frequency range will stand out with corner placement. For this, we've also provided the ULW-10 with the ability to alter its response for your new environment with an onboard one band parametric equalizer (SOS). As "boomy" bass is often the result of the largest untamed peak, we're confident that you will find this feature an indispensable tool for shaping your subwoofer into the way you'd like to hear it: flat, clean, and powerful. More on this in section 5...

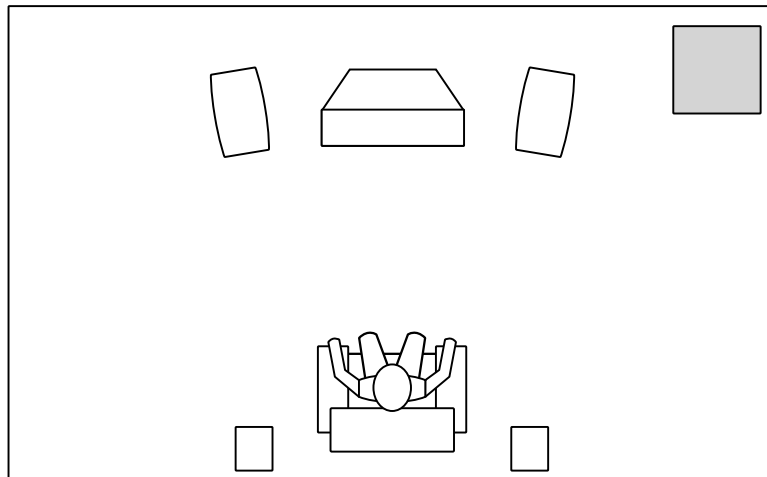


Figure 2.1

2.2 Subwoofer Location

The low frequencies played by your ULW-10 subwoofer tend to be non-directional due to the extraordinarily long wavelengths involved. As a result, regardless of where your subwoofer is placed, it should not be easily localized, but should instead produce a balanced and enveloping response. Factors that can affect performance in this regard are rattles from shelves, walls, or other nearby objects, as well as distorted output. If you are having issues with subwoofer localization, try to isolate any rattling or buzzing objects, or place the sub in another corner of 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 or pre/pro. An overdriven output can induce audible distortion. To resolve this problem, you may need to turn down the subwoofer level on your processor and turn the gain level up on the subwoofer itself to compensate.

SECTION 3—CONNECTING YOUR ULW-10 SUBWOOFER

NOTE: Please be sure your subwoofer is not plugged in and the rest of your system is turned off.

When making your connections, be sure to use a high quality and reliable interconnect cable. It should be shielded and long enough to do the job, but not excessively long. Your subwoofer cable is likely to be the longest interconnect in your system.

The simplest connection between a home theater receiver or processor and your ULW-10 Subwoofer is directly from the pre-amp output to the LFE input on the ULW-10. See figure 3.1.

If used with a 2-channel integrated amplifier, or any source without a dedicated sub/LFE output, you will need to use a Y-splitter to join the L and R low-level output from your preamplifier or receiver. Often, *Tape* or *Monitor* outputs will provide an appropriate low-level stereo signal if the dedicated output does not exist. *Note: you may use the tape out as a last resort as the volume level is fixed and you need to adjust the level control on the back of the subwoofer anytime you change the main volume control.* See figure 3.2 below...

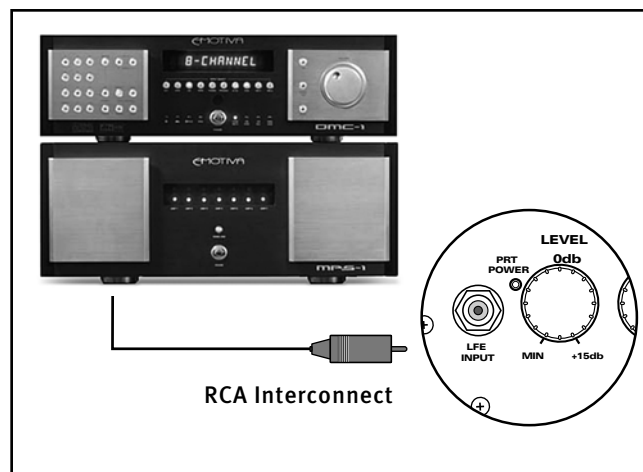


Figure 3.1

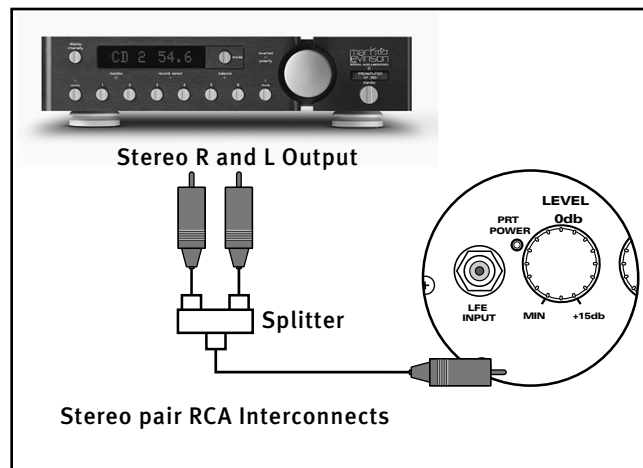


Figure 3.2

SECTION 4—SETTING UP YOUR SURROUND PROCESSOR OR RECEIVER

4.1 Small or Large?

Many of today's surround processors and home theater receivers will allow you to set all 5 speakers in your room to either small or large, thus changing the way your ULW-10 interacts with your system.

Like almost all things audio, which setting to use is somewhat subjective, though 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* and crossed over to the ULW-10 at 80Hz. (small speakers might require a higher crossover) Of course this is assuming the use of a high performance subwoofer such as the ULW-10. A strong sub ideally placed will handle sub-80Hz information better than *most* loudspeakers in *most* rooms. This is mainly due to the tendency for competing sources of information below 80Hz to result in destructive bass wave cancellation, thus eliminating the very frequencies your subwoofer was designed to play. In addition, when crossed over with your ULW-10, the other loudspeakers in your system will play with greater ease and less distortion, free from the demands of deep and complex sub-80Hz waveform reproduction.

Your speaker system amplifier will be less taxed as well, since much of the stress of producing deep bass will be eliminated. Consequentially your loudspeakers should sound cleaner and more controlled.

An easy and *user friendly* way to test different methods and frequencies for crossing over your subwoofer is to use low frequency sweeps recorded on special program material. One of our favorites is 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 (explained in the following sections), watch for the smallest amount of overall needle fluctuation while you direct and descend the tones from speaker to subwoofer as you go around your system. In other words, the point at which the signal transitions between your satellites and subwoofer should be completely seamless and without definition.



4.2 Simple Calibration



To begin configuring your subwoofer for optimum performance (a) in your room and (b) in combination with your other loudspeakers, you'll first need a Sound Pressure Level (SPL) meter. Radio Shack sells an analog SPL meter (shown to the left) that works very well for this purpose. Set the meter to *Slow* with a 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 75dB, so the 70 setting on the meter would be appropriate for them.

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

- From the receiver or pre/pro's speaker calibration menu, set the subwoofer level to 0dB. Start with the gain on the subwoofer around 1/4 to 1/2 of the way up from the -15 mark.
- In the speaker configuration menu, be sure all your speakers are set to *small* with subwoofer to *yes*. For this exercise, the crossover should be set to 80Hz.
- Set the volume control on your pre/pro or 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 it's level using the gain control on the subwoofer itself until it reaches the sound pressure level used for the other speakers.

An assistant is very helpful in this process. Some like to run their sub a bit louder (*hot*) for movies by increasing the sub level (in the receiver's control panel) by 5dB 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. If you find the need to go much above +2 or +3 consistently, we recommend adjusting the gain control on the sub's amplifier upward rather than using the receiver's volume control—this will eliminate the possibility of the subwoofer receiving a distorted input signal. Conversely, using too low of a value for the subwoofer level on the processor may result in difficulty keeping the subwoofer's auto-on feature *awake* during quiet passages.

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 75dB or 85dB 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 75dB or 85dB test tone.

(((*) What is reference level? Reference level allows for peaks of 105dB from the speakers and 115dB for the LFE channel. When calibrated as above, the correct relative volume of each speaker will be as the director/sound engineer of the film intended.

4.3 CROSSOVER SETTINGS

Your ULW-10 Subwoofer features a continuously variable crossover that allows you to set a low-pass filter at any point between 40Hz and 150Hz. In addition, many popular receivers and surround processors also feature built-in electronic crossovers (please consult your receiver's instruction manual). If present, we recommend using your receiver's crossover and rotating the crossover dial to 'bypass' on the subwoofer, thus disabling it.

After setup is completed, during which an 80Hz crossover is recommended, you can adjust your crossover accordingly either in the subwoofer itself or as recommended in your receiver's setup menu. Typically, the smaller your speaker OR the louder the system will be played, the higher the crossover point. Conversely, larger speakers OR lower volumes allow for lower crossover settings. The THX standard, what AV123 recommends is using an 80Hz crossover.

4.4 ULW-10 Phase Adjustment

The phase dial (see "1" on figure 1.1) controls the relative phase of the subwoofer to best reinforce the other loudspeakers in your system. Adjustments to this control will change your ULW-10's interaction with the rest of your speaker system, providing the least cancellation, and thus the best response in any room. With SPL meter in hand (or, better yet, on a tripod), play an 80Hz tone (for this exercise the crossover point must be set to 80Hz) and slowly rotate the phase control from 0 towards 180. Watching your SPL meter, find the point that results in the biggest peaks in sound pressure levels (i.e. reads highest on the meter). This setting indicates the least amount of bass wave cancellation, and should be held constant until the subwoofer or other speakers in your room are moved, or placement is altered in any way. With typical front corner placement in most rooms, you may very well find the 0 setting to be optimum.

SOS (SUBWOOFER OPTIMIZER SYSTEM)

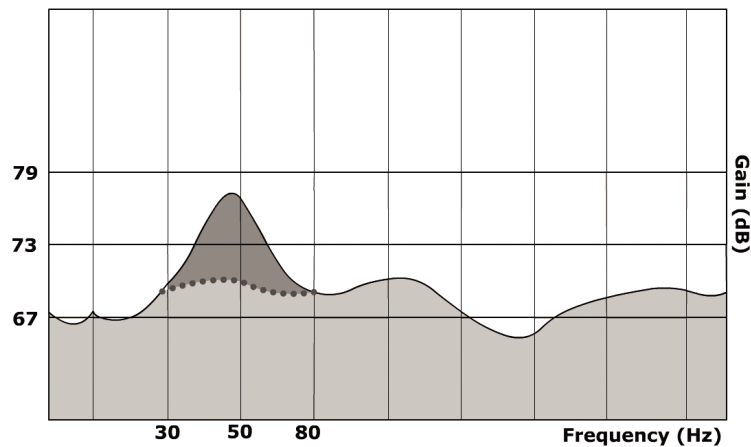
Introduction

The Automated Controlled Environments, Inc. Subwoofer Optimizer System (SOS) is an automatically calibrating, subwoofer optimization component that acts to attenuate an audio system's major room mode resonance to provide significant improvement in measured and subjective bass system performance. After installation and calibration, your system will have a more linear frequency response, bass evenness, tightness, extension, and improved sound clarity.

Technology

The Subwoofer Optimizer System makes use of a unique process which combines processor controlled digital operation with Analog Signal Processing (ASP) technology. The digital circuitry is used to set the calibration level, generate test tones, identify room resonances, and set filter parameters. The unit performs this procedure automatically using the special calibration microphone, which is included with the system. When the calibration procedure is complete, the digital portion of the unit's circuitry is turned off. This way, it won't interfere with the analog signals passing through the unit.

The following graph from a spectrum analyzer output plot demonstrates the effect of the SOS's ASP technology on an actual subwoofer in a large room. The upper line represents the subwoofer's response from 20 to 80 hertz with a constant input. The curve shows a broad hump (major room mode resonance) between 30 and 80Hz.



SECTION 4—SETTING UP YOUR SURROUND PROCESSOR OR RECEIVER

(!!) *Note: Do not attempt to replace the included microphone with one of your own. The calibration microphone is a special model specifically designed for subwoofer frequencies. Use of alternate microphones may damage SOS.*

Getting Started

Do not perform the Subwoofer Optimization System calibration and adjustment procedure on your system with any of the bass, treble, or loudness (contour) controls in operation. Defeat these controls or adjust them to their minimum (zero) positions prior to the start of the procedure.

Once the system has been properly calibrated, these controls can be used to 'fine tune' the system.

(!!) *Note: When calibrating two or more subs, run only one sub/SOS calibration at a time.*

Set the gain control to a mid-point (50 to 65%) prior to the start of the calibration procedure. Operating the amplifier at high volumes will place undue strain on the electronics and speaker drivers, and could damage them.

If your subwoofer amplifier has a Crossover Frequency Control, you have two options. Option one: Defeat the control or set the control maximum (highest frequency) setting prior to the start of the calibration procedure.

Option two: Set the crossover 10-20Hz higher than your planned final crossover setting (on your processor or the sub itself). The reason for this is if your room causes a peak at 120Hz for example but you plan on utilizing an 80Hz crossover, SOS will remove the peak at 120Hz but this will be of no benefit to you. Option one is easiest and will work for most rooms.

Following SOS calibration, the control should be reset as part of the final system balance procedure.

If your receiver or processor has a subwoofer volume (level or gain) setting, set that control to a mid-value prior to the start of the calibration procedure. Once the system has been properly calibrated, this control can be used to set the subwoofer level to best integrate with the rest of the system. Failure to do so may affect the calibration procedure, may limit the ability to adjust the system following the calibration procedure, or may damage the components.

Whenever changing components, cables, plugs, or wires, be sure to first turn off all equipment. This prevents signal transients from passing through your system, which can damage components.

Connections

1. Turn off your receiver or processor and amplifier(s), including the ULW-10 amplifier, and all source equipment such as CD, DVD, and VCR players, TVs, Tuners, etc.
2. Connect the line level input (RCA) cable from your receiver or processor and the other end to the LFE connector on the ULW-10.
3. Plug in the supplied microphone into the mic input port on the ULW-10.
4. Turn on the subwoofer amplifier, and set the volume and crossover frequency controls as mentioned in the Getting Started Section.

The Subwoofer Optimization System is now ready for calibration and use. Proceed to the CALIBRATION PROCEDURE Section to perform this operation.

CALIBRATION PROCEDURE

Suggestions

While the Subwoofer Optimization System calibration process is automatic, following these suggestions will help insure the maximum benefit from the unit for your system's performance.

Configure the listening environment as closely as possible to how it is arranged during normal operation. Furniture should be located where it is normally positioned during system use and heating and cooling systems should be operating. This includes anything that is normally in operation during the use of the system, such as projectors, lowered screens, draperies, and doors.

Set-up

1. Check that your receiver/processor and all amplifiers, except the subwoofer amplifier, are powered off. Also check that all sound source components (e.g., CD, DVD, TV, Tuners, VCR, etc.) are off.
2. Unwrap the microphone and cable that came with the unit. The system provides a twenty-foot cable, which should be sufficient to reach from the Subwoofer Optimizer System unit to the primary listening position. In situations where the cable will not reach, do not attempt to add an extension to the cable. Either select a listening position as close to the primary position as is possible. The object is for the microphone to be in a position as close to where you would normally be located within the listening environment as possible. The microphone should be oriented such that it is at your seated ear level with the large, cartridge end pointing toward the ceiling. The microphone can be held (good), attached to a support (better), or fixed to a stand (best). Be sure to not cover the cartridge end of the microphone and that the unit is several inches away from any other body or surface. Refer to the Microphone Placement Section (see below) for additional information. Insert the plug from the microphone into the MIC connector on the ULW-10.
3. Set the switches on the ULW-10 to OPERATE – FILTER – NORMAL.
4. The green indicator light (labeled CAL'D) on the ULW-10 (the same end as the function switches) should not be lit [first time use only].
5. Set the switches on the ULW-10 to CAL – FILTER – NORMAL. After approximately 5 seconds a series of low frequency tones should be audible from the subwoofer. These tones will repeat with increasing volume.
 - a. If the tones stop after 1 cycle and the green CAL'D light flashes slowly (approximately once per second), this indicates that either the microphone or subwoofer is not properly connected, or that the subwoofer amplifier level control is set too low. If this is the case, set the unit switches to OPERATE – FILTER – NORMAL, check all connections, and increase the subwoofer amplifier level slightly. Set the unit's switches to CAL – FILTER – NORMAL. The repeating series of tones should again start.
 - b. If the tones stop after 1 cycle and the green CAL'D light flashes quickly (approximately three times per second), this indicates that the subwoofer amplifier level control is set too high. If this is the case, set the unit switches to OPERATE – FILTER – NORMAL and decrease the subwoofer amplifier level slightly. Set the unit's switches to CAL – FILTER – NORMAL. The repeating series of tones should again start.
 - c. This procedure may need to be repeated by the user until the subwoofers output level is optimized to support filter calibration.
6. Once levels are properly set, the calibration tones will repeat, the response measurement procedure and filter settings will be made, and the green CAL'D light will light continuously. This indicates a successful calibration.

Set-up cont.

7. Set the switches on the ULW-10 to OPERATE – FILTER – NORMAL. The SOS will remain calibrated regardless of power interruptions.
8. Disconnect the microphone plug from the ULW-10, gather up the microphone and cable, and store for later use.
9. Apply power to your system equipment and adjust the subwoofer amplifier level to properly integrate with the rest of the system (refer to the FINAL SYSTEM BALANCE Section). Because the SOS filter acts to reduce room resonance modes, the average subwoofer level after calibration may be lower than previously set and will most often need to be adjusted higher to match previous levels.
10. The optimized system is now ready for use.
11. To recalibrate the system, return to step 1 of the Set-up Section. It is not necessary to disconnect any of the connection cables in the system.

Final System Balance

After correctly performing the calibration procedure with the microphone connected to the system and verifying that the subwoofer is operating correctly with the rest of your system, it is time to perform a final system balance. Due to the nature of the analog filter being used by the Subwoofer Optimizer System to optimize your system for its room resonance, you may need to increase the level of the subwoofer amplifier. Use your systems internal test tone generator, external test tone signal sources, or your ear to adjust the level to provide the best possible integration with the rest of your system's speakers. Under normal conditions only a slight level increase to the original setting should be needed.

You are now ready to enjoy the benefits of an optimized subwoofer as part of your system. Of course, you may fine-tune the subwoofer gain control to your listening preference or to allow for source material differences.

By-Pass Test

Before listening through your optimized system, you may want to compare the new system configuration with the original configuration. To enable the by-pass mode of the Subwoofer Optimizer System, set the switches on the ULW-10 to OPERATE – BYPASS - NORMAL. To re-engage the filter settings, set the switches on the ULW-10 to OPERATE – FILTER – NORMAL. The room resonance filter settings will remain stored within the unit and you will not need to repeat the calibration procedure.

In the situation where two ULW-10s have been used, set the switches on both ULW-10s to OPERATE – BYPASS – NORMAL. To re-engage the filter settings, set the switches on both ULW-10 to OPERATE – FILTER – NORMAL. The room resonance filter settings will remain stored within the units and you will not need to repeat the calibration procedures.

CALIBRATION PROCEDURE

Test Tones

The effect of the optimized filter on your system will depend in large part on the system source material and may not be easily discernable. In order to better detect the differences between filtered and non-filtered operation, a test tone generator has been designed into the system. The generator provides a repeating 20 to 80 hertz frequency sweep and is engaged by setting the unit TEST switch. Setting the switches on the ULW-10 to OPERATE – FILTER – TEST provides test tones with the filter engaged. Setting the switches on the ULW-10 to OPERATE – BYPASS – TEST provides test tones with the filter removed.

To return to normal SOS operation, set the switches on the ULW-10 to OPERATE – FILTER – NORMAL. The room resonance filter settings will remain stored within the unit and you will not need to repeat the calibration procedure.

In the situation where two ULW-10s have been used, set the switches on ULW-10 B to OPERATE – BYPASS – NORMAL and the switches on ULW-10 A to OPERATE – BYPASS – TEST to provide test tones with the filters removed. Set the switches on ULW-10 B to OPERATE – FILTER – NORMAL and the switches on ULW-10 A to OPERATE – FILTER – TEST to provide test tones with the filter engaged.

To return to normal SOS operation, set the switches on both ULW-10s to OPERATE – FILTER – NORMAL. The room resonance filter settings will remain stored within the unit and you will not need to repeat the calibration procedure.

Microphone Placement

The optimum location for the microphone during the calibration procedure is in the room where you are most likely to sit when using the system. This is where you will want to place or hold the microphone during the measurements. The microphone should be oriented such that it is at your seated ear level with the cartridge (large end) pointing up toward the ceiling.

Room response nulls can occur at any frequency within the listening environment. These nulls are caused by the destructive wave interference of the sounds within the listening environment and are a factor of the size, shape, and configuration of the environment. Response nulls occur in fixed locations within the environment and may affect the calibration process of the Subwoofer Optimizer System. If after running the calibration process and listening to the system performance, the system does not appear to have a noticeably smoother response, repeat the process with the microphone relocated to a different location. Usually you will only need to move the microphone a few inches horizontally to correct the problem. Do not move the microphone more than 12 inches away (in any direction) from your preferred location.

This concludes the SOS section.

Section 5—Proper Care and Feeding

Your Rocket ULW series subwoofer does not need much exterior maintenance other than an occasional dusting. The painted surface or wood veneer features a durable matte finish that requires only some dusting, or can be wiped off with a water dampened soft cloth.

Above all, listen and enjoy!

5.1 Warranty Policy and Terms

All AV123 products carry a limited manufacturer's parts and labor warranty. All ULW series subwoofers 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 register your product online at www.av123.com, we will extend the warranty an additional two years on the cabinet and driver, and an additional 1 year on the amplifier and electronics. This extended warranty is free simply by registering within 60 days of your purchase. We urge you to take advantage of this offer.

Warranties apply to the original owner 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.

5.2 Stay in Touch

Remember that personalized tech support is only a phone call away. In the USA call toll-free 877.543.7500 or worldwide at 303.543.7500. Whether you need technical assistance, have a suggestion to make your ULW-10 even better, or simply want to let us know how much you enjoy your new subwoofer, please feel free to contact us at any time!

For the latest information on the entire Rocket line or to register your product, please visit us online at www.av123.com

5.3 ULW-10 Specifications

Type: Acoustic suspension, single-driver system

Driver: 10" black-anodized alloy cone woofer

Frequency Response: 26Hz - 150Hz +/- 3dB

Size: (W x D x H): 12.25" x 11.75" x 13.00"

Weight: 39lbs / 47lbs shipped

Other Features:

- SOS Automatic Parametric Equalizer
- Continuously (infinitely) variable phase, gain, and crossover adjustments (40Hz - 150Hz)
- Crossover disable option
- LFE summed R/L RCA input
- Auto-on / standby mode



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Thank you for supporting AV123