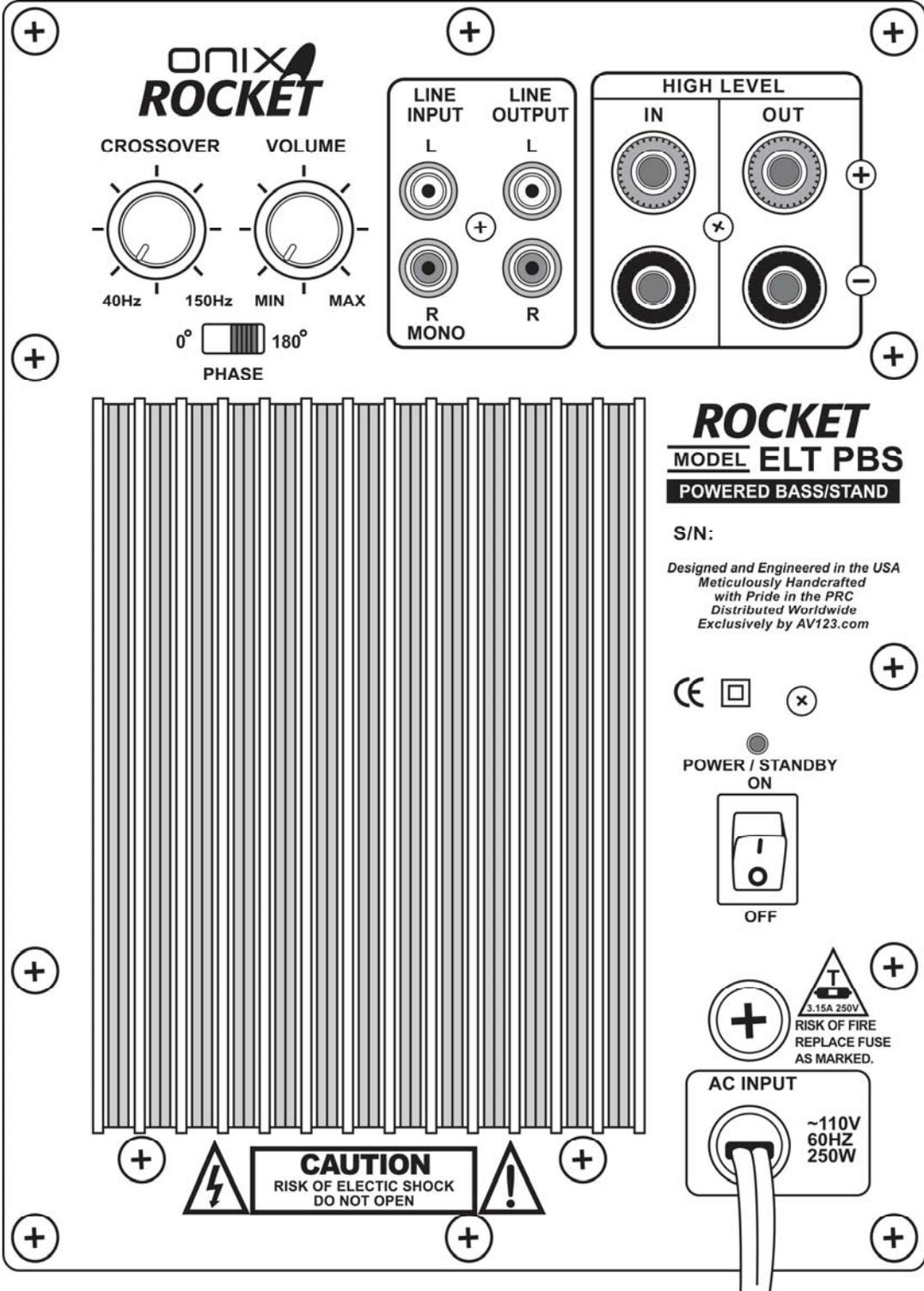




**Enjoyment  
Guide  
for the  
ELT PBS  
(Powered Base/Stand)**

Yours exclusively through

**AV123**



# ONIX ROCKET

**CROSSOVER**      **VOLUME**

40Hz      150Hz      MIN      MAX

0°      180°

**PHASE**

**LINE INPUT**      **LINE OUTPUT**

L      L

R MONO      R

**HIGH LEVEL**

**IN**      **OUT**

## ROCKET

**MODEL ELT PBS**

**POWERED BASS/STAND**

S/N:

*Designed and Engineered in the USA  
Meticulously Handcrafted  
with Pride in the PRC  
Distributed Worldwide  
Exclusively by AV123.com*

CE      RoHS      X

**POWER / STANDBY ON**

OFF

3.15A 250V

**RISK OF FIRE  
REPLACE FUSE  
AS MARKED.**

**AC INPUT**

~110V  
60HZ  
250W

**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN

**The PBS is very versatile and offers many methods of connection. Below we detail how to connect the PBS to systems with and without a subwoofer in use. You can also design your own connection scheme; you are not limited to those listed here!**

## **Receiver / processor configuration**

*(Note: This document assumes you are using the PBS' with your main speakers.)*

Option one:

Set your receiver or processor to MAIN speakers = LARGE. You may need to adjust the SUB setting in your receiver or processor to say ENHANCED or MAINS + SUB or something to that effect. This ensures your sub will be working in tandem with the woofers in the PBS.

Option two:

If your receiver or processor offers very low crossover points to the sub, you can try setting your MAIN speakers as SMALL but with a 30 or 40Hz crossover. Set your SUB to YES. This will give you a lot of low bass in your PBS's but not the lowest of the low. You may prefer this to option one but it's user dependant. If you tend to play your system at reference levels (very loud!), this is probably your best option.

## **If you have a subwoofer...**

Take the speaker cable from your amplifier or receiver and plug it into *High Level inputs* on the back of the PBS amplifier. Next take the supplied jumper cable and go from the *High Level output* terminals to the binding posts on the back of the speaker.

## **If you do not have a subwoofer...**

Connect the speaker cable coming from your receiver or processor to the speaker as you normally would.

Use the subwoofer out with the PBS. If you have only one sub/LFE out, split the signal (with a Y-splitter such as the Revelation product we have) and run one cable to each PBS amplifier. Connect the cable to the *Line Input 'R Mono'*.

Set your receiver or processor MAIN = SMALL.  
Set SUB = YES.

## **PBS Amp Controls**

Adjust the PBS controls the same for either connection method:

Adjust the controls on the back of the PBS amp to your liking. The left-most knob is frequency. This controls the highest frequency that the woofer will be playing. Most like it around 120Hz but experiment and see what you like.

The switch below is phase. To properly set this, you need to perform a frequency sweep. If you don't know how to do this, refer to the next section in this manual. Basically, you want to use the setting that provides the loudest output as well as the flattest response.

The final knob is gain (volume). Set this so that you get a nice 'foundational' bass lift but not too much that it's over powering. Start around 12 o'clock and adjust from there. Play several *different* CD's and DVD's. You want the system to sound balanced; like the PBS is part of your main speaker with a seamless blend between the two.

## **Phase Adjustment**

The phase switch (see AMP DRAWING) controls the *relative* phase of the woofer to best reinforce the other loudspeakers in your system. Adjustments to this control will change the PBS'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). Be sure not to play your system too loud for this exercise. Start with the phase control in the "0" position. Record the reading on your SPL meter. Repeat with the switch in the "180" position. Select 0 or 180 based on which position 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. Ideally, you should play test tones from 30Hz through 150Hz with the phase set to 0 and 180 and use the best setting for the range of frequencies.

## Performing a Frequency Sweep

Though there are a number of ways to perform an accurate frequency sweep, we've detailed the steps involved in the most basic method below.

- a. Sit in your favorite seat and hold your Radio Shack SPL meter at a 45-degree angle half way between horizontal and vertical.
- b. The meter should be placed at ear level when seated in the primary listening position, and is best if supported by a stationary object such as an end table or tripod.
- c. Set the control on the meter to 'C-weighting' and 'slow'.
- d. Assuming you have already calibrated all channels to reference level (see the owner's manual for your main speakers or receiver/processor for how to do this), the PBS should be calibrated to 75dB (or 85dB if your receiver/processor uses that standard).
- e. Play a 31.5Hz (or 32Hz) track from a test tone CD, such as "*Rives Audio Test CD 2*" available through [www.rivesaudio.com](http://www.rivesaudio.com), and record BOTH the frequency, which corresponds to the track on the test disc, and the sound pressure level (volume) as shown on the meter.
- f. Next, play the tracks from 30Hz to 150Hz and record the sound pressure level for each frequency played.

**Important Note:** *The Radio Shack sound meter uses C-weighting which compensates for the lower sensitivity of the human ear at low frequencies. We want to measure the actual SPL. The Rives test disc mentioned earlier automatically compensates for C-weighting. If you use a different test disc that does not automatically compensate for this, a correction key is needed to ensure proper response before your final measurements are plotted. We suggest gathering your data using the readings on the meter and **then** correcting your results with the compensation coefficients shown at the end of this manual.*

## Proper Care and Feeding

Your Rocket PBS does not need much exterior maintenance other than an occasional dusting. Please use care with the gloss black finish or real wood veneer and treat it as you would a car or piano finish. The gloss black can be waxed with automotive carnauba wax if desired. For general dust removal, we recommend the 3M Yellow Detail Cloth (part # 39016) or Meguiar's Ultimate Wipe Detailing Cloth (part# 29910) as it will not scratch the black surface or real wood veneer. Additionally, the durable matte finish on the wood veneer requires only some dusting, or can be wiped off with a water dampened soft cloth if needed.

Above all, listen and enjoy!

## AV123 Warranty Policy and Registration

All products sold through AV123 carry a limited manufacturer's parts and labor warranty. All Rocket Outdoor 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 to [www.av123.com](http://www.av123.com) 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.

## Specifications

**Type:** Acoustic suspension, single-driver system

**Driver:** 8" custom composite cone woofer

**Frequency Response:** 33 Hz—150Hz +/- 2 dB

**Size (W x D x H):** 7.5" (add 3" when including the base) x 9" (add 1" for amp protrusion or 1.5" when including the base) x 28.75". The top area is 7.5" W and 6 11/16" D

**Weight:** 35 lbs.

**Other Features:**

8" woofer is high passed at 31Hz

0-180 phase adjustment, gain, and crossover adjustments (40Hz-150Hz)

LFE summed R/L RCA input

Auto-on / standby mode

## Radio Shack Compensation Chart

The below shows the correction values for the SPL meter mentioned earlier in this manual. For any number read (left column) from this meter, it is necessary to add the correction value (right column) before plotting actual results.

| Frequency (Hz) | Gain (dB) |
|----------------|-----------|
| 20             | +7.5      |
| 25             | +5        |
| 32             | +3        |
| 40             | +2.5      |
| 50             | +1.5      |
| 63             | +1.5      |
| 80             | +1.5      |
| 100            | +2        |

*Thank you for your support!*

**AV123**