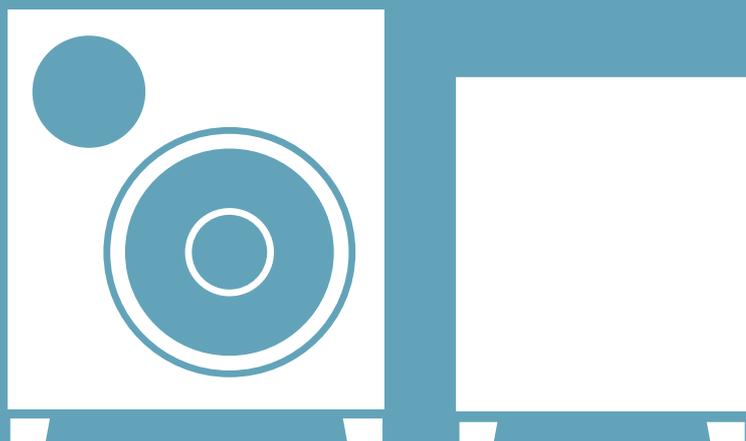




# SEISMIX 1 AND SEISMIX 3 OWNER'S MANUAL



## Congratulations on choosing Krix

The Seismix 1 and Seismix 3 active subwoofers will complement existing stereo or home theatre systems, improving low frequency performance for an immersive experience. The Seismix 1 and Seismix 3 are compatible with a variety of small to large sized, sealed or vented main speakers.

Your subwoofer is powered by an efficient class-D amplifier capable of delivering maximum output with low distortion for sustained periods of listening enjoyment. The amplifier module incorporates a switch mode power supply (SMPS) for efficient operation with less heat generation and consistent performance regardless of mains voltage variations.

# SETUP IN BRIEF

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*The following setup procedure will help you achieve the best performance from your subwoofer:*

### 1. Controls and Features

Familiarise yourself with the controls and features of your subwoofer.

### 2. Positioning

Determine a suitable location for your subwoofer unit.

### 3. Connection and Calibration

Connect your subwoofer to your system. Listen to a variety of music/movies to assess the sound and settings of your subwoofer.

### 4. Listen and Enjoy

Listen to your favourite music/movies and enjoy.



## Disclaimer

Please read the important safety instructions on the back of this manual before you plug in your equipment.

Disclaimer

To the extent permissible by law:

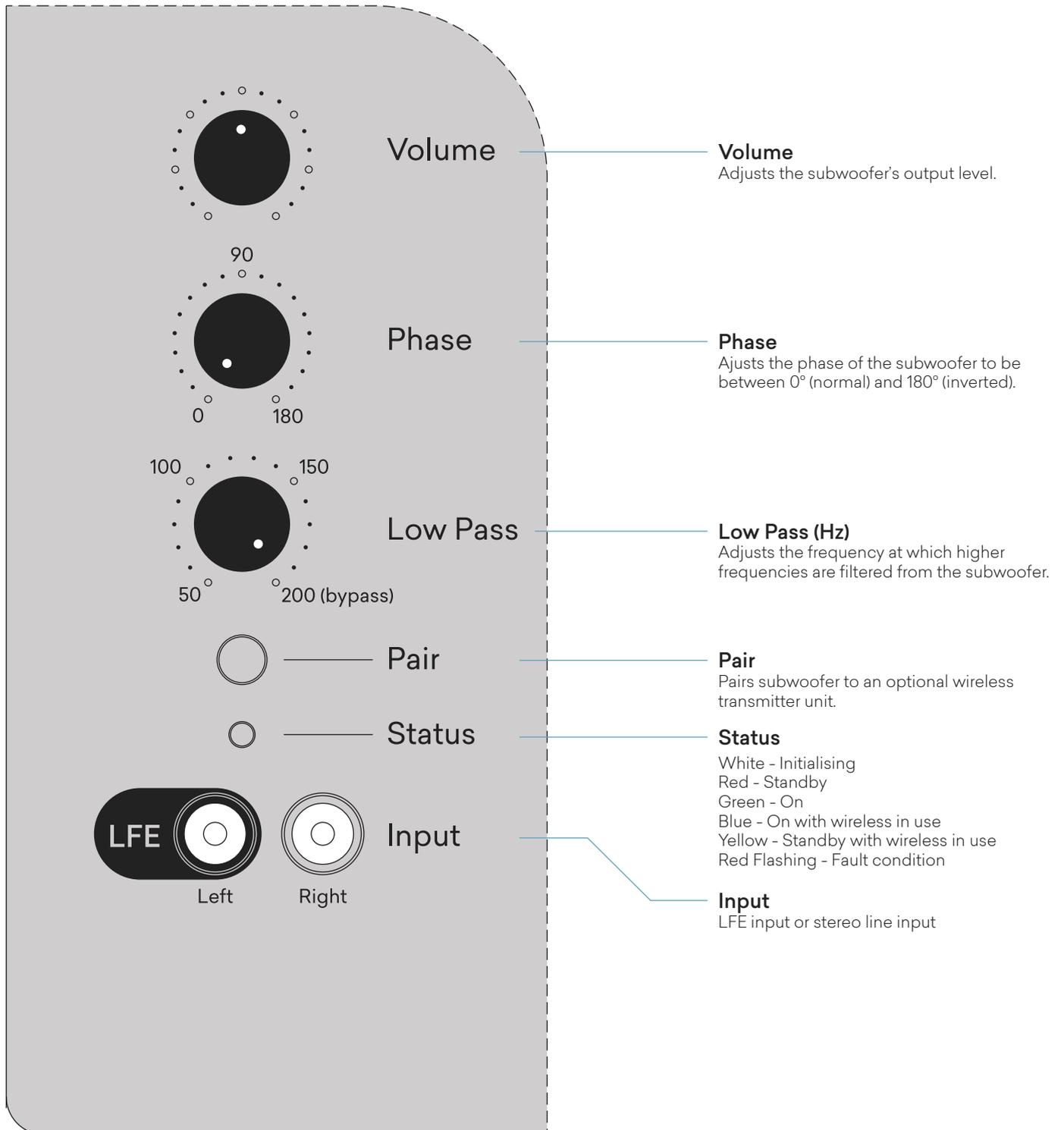
1. All warranties, conditions, representations, promises and statements relating howsoever to this product whether express or implied and whether in contract or tort are excluded to the extent permitted by law; and

2. Our liability to you under a condition or warranty (if any) implied into this sale and purchase agreement relating to this subwoofer by the Trade Practices Act 1974 (as amended) or any other law (whether a law of Australia or any other country) other than a condition implied by Section 69 of the said Act is limited at our option to:

- the replacement of the product; or
- the supply of an equivalent product; or
- the repair of the product.

If you do not accept the above conditions, return this product (in the original packaging) with proof of purchase for a full refund.

## CONTROLS AND FEATURES



## POSITIONING

### *The most 'obvious' position for your subwoofer is not always the best*

The bass produced by a subwoofer is omnidirectional and very hard for your ears to localise. Therefore a subwoofer can be placed virtually anywhere in your listening room and provide the impression that the bass is radiating from your main speakers. The quality of bass however is affected by the position of your subwoofer due to complex acoustic interactions with your listening room. Depth, punch, and integration with your main speakers are all affected by the position of your subwoofer. Experimentation is always recommended to achieve the most satisfying results.

A. Often the best place for a subwoofer is in a corner at the front of your room. This position generally provides the maximum output from your subwoofer. If your subwoofer sounds excessively 'boomy' in this location try moving it out 20-50cm from the corner or along one of the adjacent walls.

B. Another option is placing your subwoofer along the front wall of your room, within a metre of a front speaker. In some setups this will provide a smoother tonal balance than corner placement. This position is particularly good for smaller satellite/bookshelf speakers to help integrate the sound of the subwoofer and main speakers.

C. Some people prefer to hide their subwoofer next to or behind a couch. Listeners on the couch may enjoy the extra vibrations felt through the couch, however the bass produced from your subwoofer may be easier to localise. Therefore it may be harder to integrate the sound of your subwoofer with your main speakers.

D. Placing your subwoofer away from your walls can result in satisfying results but maximum output from your subwoofer may be reduced.

E. Subwoofers may also be placed inside cabinetry. Please contact your Krix retailer or Krix directly for suggestions with this arrangement.

⚠ The subwoofer is not magnetically shielded; do not place near CRT screens (old style TVs), and magnetic media.

⚠ Avoid placing your subwoofer near sources of heat, direct sunlight, humidity etc.

⚠ The rear amplifier panel can get hot, ensure adequate ventilation. Read the safety instruction on the back of this manual for more details.

Tip Many modern AV receivers include automatic room correction features. It is recommended that these correction features are disabled until an optimal subwoofer position has been determined.

Tip To get the most from your subwoofer we recommend experimenting with the following positioning technique:

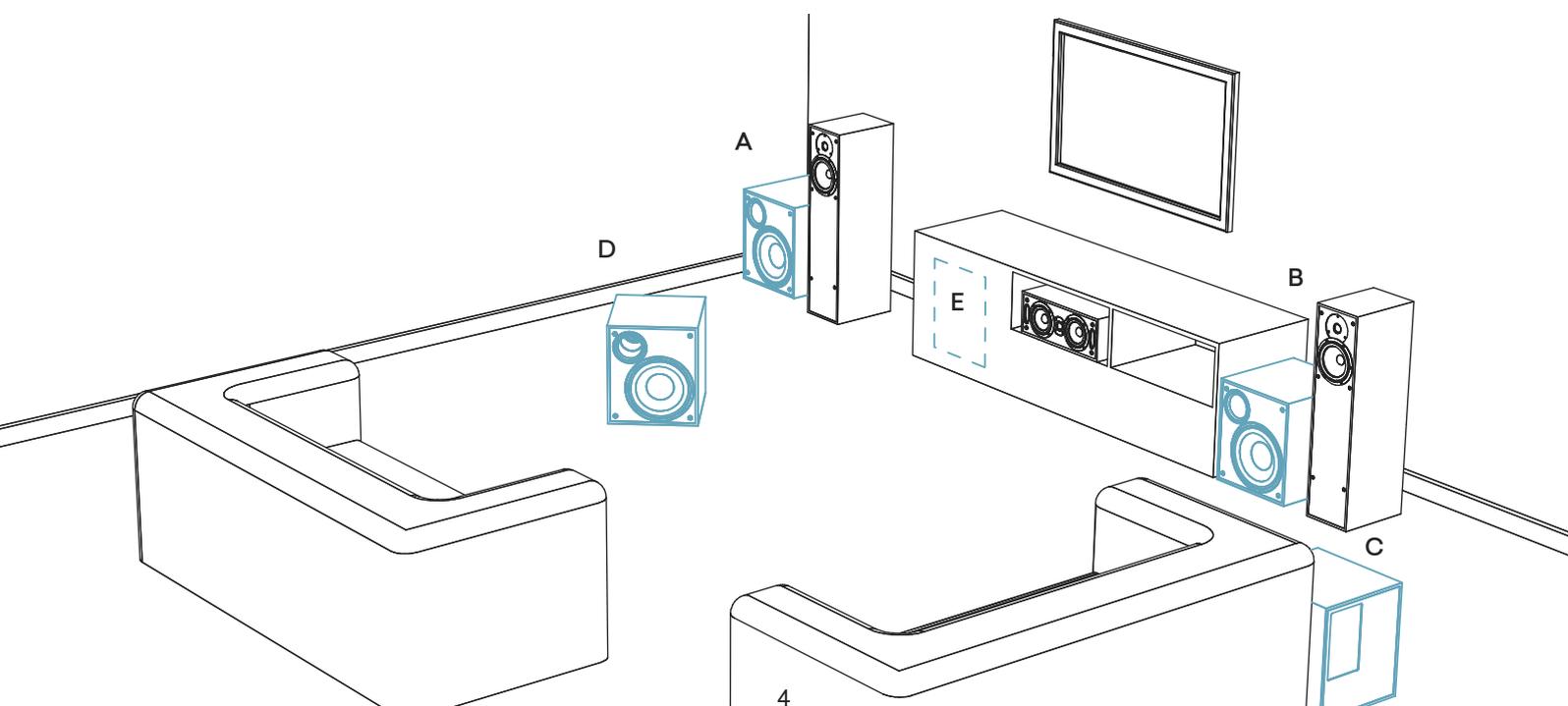
Place your subwoofer in your central listening position, you may need to purchase a long subwoofer input cable.

Disconnect all speakers other than the subwoofer.

Play some music or a movie with heavy bass content.

Move around your room, listening at floor level. Note any changes in the tonal quality of the bass.

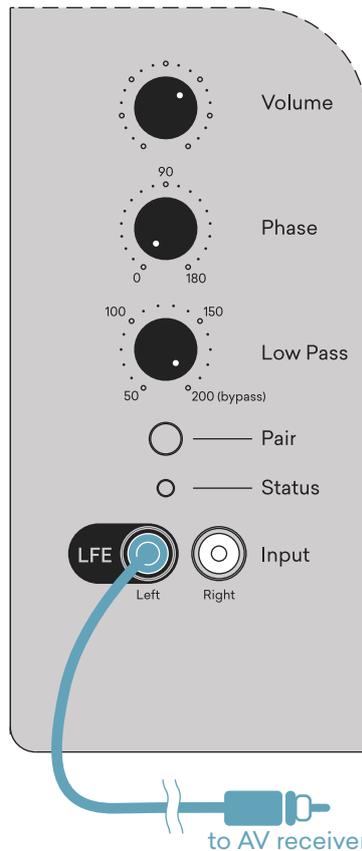
Mark out one or more potential locations that offer a smooth, extended sound or a sound quality you enjoy. Relocate your subwoofer to this location, reconnect speakers, and listen again from your central listening position. Permanently locate your subwoofer to this new location if you notice an improvement in the sound quality.



# CONNECTION & CALIBRATION - AV RECEIVER

## Connection and Initial Setup

- Ensure the main power switch is off and connect the mains power cord.
- Set volume on your subwoofer to the 2/3 position.
- Set phase to 0°.
- Set subwoofer low pass to 200Hz (bypass) setting. The AV receiver will manage the crossover/low pass frequency.
- Connect the subwoofer pre-out (SW) on your receiver/processor to the LFE input on your subwoofer. See "Advanced connection methods" for alternatives.
- Switch on mains power switch.
- At this time you may wish to perform the AV receiver's automatic calibration procedure. After the automatic procedure is complete you may wish to adjust your subwoofer output level to taste. Alternatively refer to the manual setup procedure below.



## Manual Receiver Setup

Ensure subwoofer is set to ON or YES in your receiver setup. Refer to your receiver/processor manual for more information.

Use the default subwoofer channel level setting on your receiver.

On your receiver select desired crossover frequency/low pass setting. As a guide, use the 80Hz setting.

**Tip** If your speakers are small (bass driver is smaller than 5 1/4") use a higher setting (100Hz,120Hz,150Hz) to send more of the bass information to your subwoofer. Consult your receiver manual for further bass management options and settings.

## Manual Subwoofer Calibration

When experimenting with the subwoofer in a home theatre installation it is also beneficial to listen to movies with extended periods of low bass (explosions, rumbles etc). This will allow you to evaluate the 'impact' and 'depth' of your subwoofer. It is also beneficial to select music that is familiar to you when carrying out listening tests. As a suggestion, play clean unprocessed recordings that use double bass, bass guitar, cellos, organ or kick drum that cover a wide bass spectrum.

Begin by playing the movie/music and slowly adjust the volume dial on the subwoofer to your desired level.

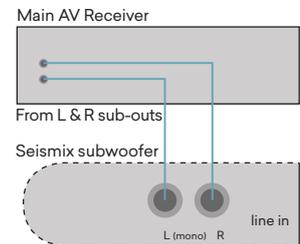
**Tip** For final tweaking of your subwoofer level you may wish to sit in the primary listening position and adjust the subwoofer channel level using your receiver's remote control. Refer to your receiver's manual for more information

Set the phase dial. The correct phase setting will produce the most bass. You may need to listen to a variety of recordings to hear any subtle change in bass energy. If no change in bass energy can be heard between phase settings, set phase to 0° default position. Re-adjusted volume if necessary.

## Advanced Connection Methods

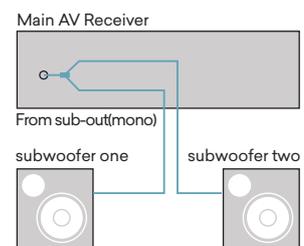
### One subwoofer - stereo connection

If your receiver has a stereo Left & Right subwoofer output feature, connect both L & R outputs to your subwoofers L & R line inputs.



### Two (or more) subwoofers - mono connection

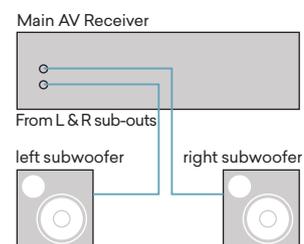
Using multiple subwoofers can be useful in large or troublesome installations where more uniform bass coverage is desired. If your receiver has only one subwoofer output, use a Y-cable or Y-adapter to allow connection to multiple subwoofers.



### Left and right subwoofers - stereo connection

If your receiver has stereo line level subwoofer outputs a left and right subwoofer may be used to provide stereo low bass reproduction. Connect each receiver sub output to the corresponding subwoofer.

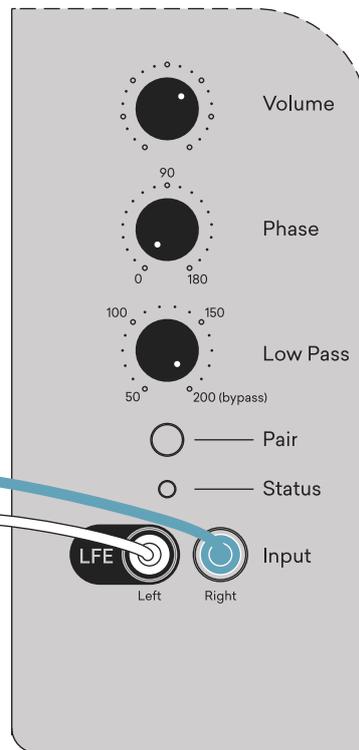
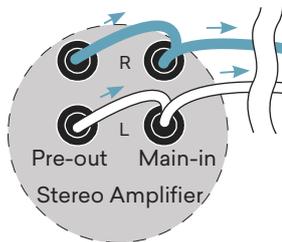
L sub out to the left subwoofer L(mono)input. R sub out to right subwoofer L(mono) input.



# CONNECTION & CALIBRATION - STEREO SYSTEM

## Defaults

- Ensure the main power switch is off and connect the mains power cord.
- Set volume on your subwoofer to the 2/3 position.
- Set phase to 0°.
- Select desired low pass (crossover frequency) setting on your subwoofer. As a guide set the subwoofer lowpass to 20hz above the main speakers low frequency limit. Refer to main speaker specifications e.g. 60Hz -20Khz speaker would require 80Hz setting.
- Set power mode to auto (middle position).



## Connection

 Requires your amplifier to feature L and R pre-out connections.

- Use two Y cables to connect each pre-out channel on your amplifier (or pre-amplifier) to the corresponding subwoofer and main amplifier inputs. If main inputs are not present on your amplifier, simply connect the pre-outputs to subwoofer line inputs.

 If your amplifier does not have L & R pre-outs you may use a "Speaker (High Level) to Line Level Converter" to connect to your subwoofer inputs.

## Calibration

It is beneficial to select music that is familiar to you when carrying out listening tests and calibration procedures. As a suggestion, play clean unprocessed recordings that use double bass, bass guitar, cellos, organ or kick drum that cover a wide bass spectrum.

Begin by playing music and slowly adjust the volume dial on the subwoofer to your desired level. For final tweaking of your subwoofer level you may wish to sit in the primary listening position and ask an assistant to adjust the volume dial on your subwoofer.

Now set the phase dial. The correct phase setting will produce the most bass. You may need to listen to a variety of recordings to hear any subtle change in bass energy. If no change in bass energy can be heard between phase settings, set phase to 0° default position. Re-adjust volume if necessary.

You may wish to fine-tune the crossover frequency/low pass setting. This will vary the amount of overlap from the subwoofer to the main speakers and increase or decrease the level at those frequencies. The effect is a strengthening or weakening of the upper bass region. Unpleasant 'woody' or 'chesty' sound qualities may suggest the low pass setting selected is too high. If the sound lacks 'body' the low pass setting selected may be too low. Re-adjust low pass setting, volume and then phase. Re-evaluate results.

# SPECIFICATION AND FEATURES

## Additional Features

### Symmetrical Vent

The Seismix subwoofer enclosure features Symmetrical bass reflex venting, where the vent exhibits the same flare radius internally and externally. This lowers subwoofer distortion and serves to reduce vent turbulence or “chuffing” at high drive levels.

### Clipping Protection

When faced with a signal peak which is in excess of what the Seismix can accurately reproduce, a limiter circuit activates to reduce the level of the signal once it passes the preset threshold. This permits the Seismix to perform at high levels with only a mild reduction in the signal's dynamic content.

### Fault Protection

In the unlikely event that the amplifier experiences a fault, the status led will flash red. If the fault persists please contact your dealer to arrange a warranty claim or repair.

### Warranty

5 years warranty applies to the cabinet and speaker.

3 year warranty applies to the amplifier and related internal electronics.

Refer to the details on the warranty card supplied.

### Queries

If you have any queries regarding the Seismix Subwoofer, or any other Krix product, please contact your nearest Krix retailer or Krix directly. Contact details are on the back cover of this booklet.

## Seismix 3 V7.0: Specifications

<b>Bass Driver</b>	Nominal 275mm (11”) diameter paper cone driver, 50mm long throw voice coil, developed for high level, low frequency reinforcement	
<b>Amplifier Power</b>	300 watts RMS, 600 watts maximum instantaneous power	
<b>Amplifier S/N</b>	>85dB (input to speaker)	
<b>Distortion</b>	<0.2% - @ 200 watts RMS	
<b>Line Level Inputs</b>	Left Input (mono)	300mV RMS for maximum output
	Left + Right Input (stereo)	150mV RMS for maximum output
<b>Frequency Range</b>	22Hz - 200Hz (-6dB) in room response	
<b>Output</b>	122dB maximum SPL in room response	
<b>Auto Power On / Off</b>	15 minute delay before switching to standby after no input signal	
<b>Phase Select</b>	0° to 180° continuously variable (relative to input signal)	
<b>Filters</b>	Lowpass filter 50-200Hz 2nd Order Highpass filter to limit driver excursion below 26Hz	
<b>Enclosure Type</b>	Bass reflex, front vented	
<b>Dimensions</b>	450mm high (inc. feet) x 360mm wide x 410mm deep (inc. grille)	
<b>Material</b>	17mm MDF	
<b>Finish</b>	Vinyl or lacquered timber veneer	
<b>Weight</b>	18kg	

## Seismix 1 V6.0: Specifications

<b>Bass Driver</b>	Nominal 200mm (8”) diameter paper cone driver, 38mm long throw voice coil, developed for high level, low frequency reinforcement	
<b>Amplifier Power</b>	300 watts RMS, 600 watts maximum instantaneous power	
<b>Amplifier S/N</b>	>85dB (input to speaker)	
<b>Distortion</b>	<0.2% - @ 150 watts RMS	
<b>Line Level Inputs</b>	Left Input (mono)	300mV RMS for maximum output
	Left + Right Input (stereo)	150mV RMS for maximum output
<b>Frequency Range</b>	27Hz - 200Hz (-6dB) in room response	
<b>Output</b>	116dB maximum SPL in room response	
<b>Auto Power On / Off</b>	15 minute delay before switching to standby after no input signal	
<b>Phase Select</b>	0° to 180° continuously variable (relative to input signal)	
<b>Filters</b>	Lowpass filter 50-200Hz 2nd Order Highpass filter to limit driver excursion below 26Hz	
<b>Enclosure Type</b>	Bass reflex, down-firing vent	
<b>Dimensions</b>	375mm high (inc. feet) x 295mm wide x 320mm deep	
<b>Material</b>	17mm MDF	
<b>Finish</b>	Vinyl or lacquered timber veneer	
<b>Weight</b>	11kg	

Due to continued development, specifications may change without notice.

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Doc Rev #10

## krix.com

Please read these important safety instructions before you plug in this equipment.

Please retain these instructions for future reference.

This equipment is manufactured to a very high standard and it should give you many years of reliable service. To minimise the chance of any problem with this equipment, take note of the following:

This equipment uses electricity at very high voltages. To avoid injury to persons, fire or damage to the unit:

- Do not use the unit near water (or something with water in it) or in the rain.
- Do not allow the unit to get wet.
- Clean the unit with a dry cloth only – do not use solvents. Unplug the unit before cleaning.
- Do not plug the unit into a power source other than the one specified.
- Make sure the power cable is protected.
- Make sure the power cable is not being pinched and that it cannot be walked on.
- Never disconnect the ground prong on the mains plug.
- When removing the power plug from the power source, do not pull on the cord.
- Do not open the unit. Refer any service to qualified service personnel.
- Do not place any thing or any part of your body into the unit.

This unit may get hot when it is being used. To avoid injury to persons, fire or damage to the unit:

- Do not put the unit near any heating source.
- Keep the unit out of direct sunlight.
- Make sure all ventilation openings are clear.
- Do not cover unit with blankets or any other materials.
- Do not place unit against curtains or furnishings.

This equipment is heavy. To avoid injury to persons:

- Be careful when you lift the unit.
- Install the unit on the ground so that it cannot fall onto anyone.

This equipment can cause extreme vibrations. To avoid injury to persons, fire or damage to the unit:

- Do not put the unit near things that might be damaged by vibration.
- Do not put the unit near things that might be moved by vibration (for example vases, candles or glass objects).
- Do not put objects on top of the unit.

This equipment is delicate. To avoid damage to the unit:

- If it starts to make a distorted or unusual noise, turn the volume down. If that makes no difference, turn the unit off and have it checked by qualified service personnel.
- If you are not going to use the unit for an extended period, unplug it from the wall socket.
- If there is a storm with lightning, unplug it from the wall socket.
- Never force any switches or controls. If they are difficult to operate, have the unit checked by qualified service personnel.
- Do not put any objects on the unit.

Avoid damage to your hearing. You only have one set of ears!

All sound equipment is capable of damaging your hearing or the hearing of others. Exposing your hearing to high volume levels for extended periods of time will cause permanent hearing damage. Even short periods at extremely high levels will cause permanent hearing damage. Children's hearing is especially sensitive and extra care should be taken when exposing children to high volume levels. Hearing damage is cumulative and it may be too late when you find out that your hearing has been damaged. We recommend that you avoid long periods of exposure at excessive volume levels.