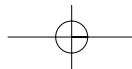


# Vulcan

## Active Subwoofer

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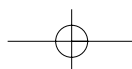
owners manual

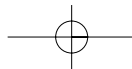


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## Introduction

Your **Vulcan** sub woofer has been designed to produce true sub bass frequencies. It will produce exceptionally deep notes which are often felt as well as heard. You will be able to adjust the settings of your **Vulcan** to suit your own personal requirements.

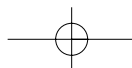
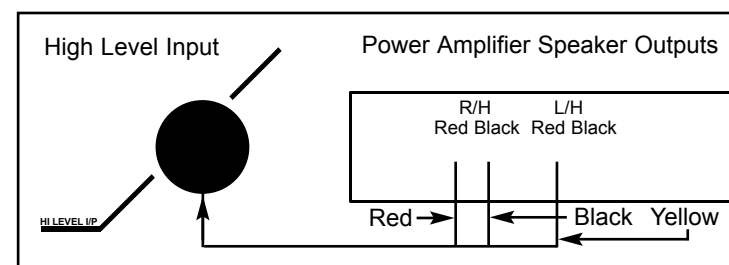
Getting the best out of your **Vulcan** will take some setting up which will be explained later in this manual. Essentially the purpose of a sub woofer is to add dynamic range to your system. Care must be taken not to overwhelm the accompanying source. Good sound balance is essential.

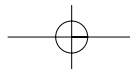
## Connections

**Always** switch off your system before any connections are made.

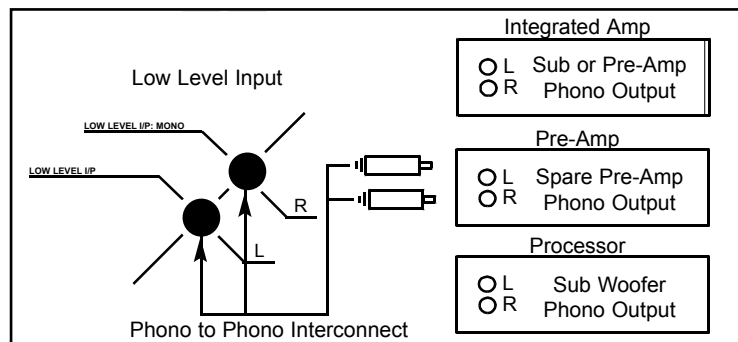
For increased versatility the **Vulcan** has two separate inputs. One Professional Switchcraft HPC Series socket and a pair of phono sockets. This is to facilitate use with both hi-fi and AV surround systems.

The first is a high level unbalanced, dual channel (stereo) input via the Professional Switchcraft HPC Series connector. Signals for this input would normally be sourced from the left and right channel speaker terminals of the amplifier. This has the advantage of ensuring that the **Vulcan** receives exactly the same signal as the main speakers. This means that the character of the bass is carried forward into the sub-bass. This will ensure superior system integration of the sub-bass with the main system. This method of connection is recommended for a straight forward hi-fi system.





The second of these inputs is a dual channel, unbalanced, low level input via a pair of phono sockets. Signals for this input would normally be sourced from a processor. If this is unavailable the source can be connected via pre amp outputs. i.e. Tape out. This method of



connection is recommended for AV systems.

If your **Vulcan** will be used with hi-fi and AV systems. Connect both the high input and the low input for optimum performance. This will allow you to easily switch between formats without having to adjust the **Vulcan** after initial set up.

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## Setting Up

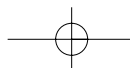
With the phase switch in position 1 (left) turn the frequency control to 230 Hz and turn high and low level adjustments too minimum. play some music with a known bass content. Adjust the high or low level gain (depending on which input you're are currently using) until the level matches your main system output.

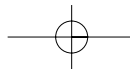
If you move the frequency control anticlockwise to minimum you will notice that the bass will almost disappear because these low frequencies are not boosted by the room. Once you have adjusted to a level you are happy with you can then adjust the frequency to the desired range.

## Positioning

The **Vulcan** has been designed to be compact, stylish and unobtrusive. It will work well wherever placed and this section will give you a guideline as to positioning. All rooms have an effect on the performance of any sub bass system, therefore placing your unit in several positions initially and deciding on the best sonic and most convenient position for your environment is recommended. Placing the unit in a corner or adjacent to a structural wall often gives the best results. Also please remember that your specialist rega retailer will always be happy to advise you on the positioning of your **Vulcan**.

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## Phase.

The **Vulcan** has a phase reversal switch which allows partial cancellation of the frequencies around the crossover point between the two systems. The two settings will be clearly different. The difference is demonstrated in timing and if set incorrectly the bass will miss time with the music. In order to gain the correct setting listen to each phase position and decide which offers the most prominent clean and tight bass response.

**Phase position 1** (left) positive/ forward cone excursion.

**Phase position 2** (right) positive/ reverse cone excursion.

Remember, if it sounds correct to you then it probably is.

## Frequency Control

The **Vulcan** carries a unique frequency control designed for ease of use. The frequencies marked from 30Hz to 230Hz also carry Hi Fi, AV and FULL RANGE.

The Hi-Fi and AV sections can be used as a guideline for correct set up as the lower frequencies are ideal for improving the dynamic range required for two channel hi-fi.

The AV section covers a broader frequency range ideal for sound effects and higher impact volume. The FULL RANGE setting (clockwise until a click is heard) by-passes the **Vulcan's** crossover.

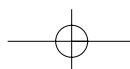
Most processors have a built in filter to optimise performance of all of the AV Speakers. This allows the user to adjust the roll off point through your AV processor to the suggested level.

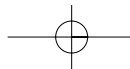
## High Level Gain

The high level gain is the main volume control when using the high level input (Hi-Fi) This will not operate whilst using low level input.

## Low Level Gain

The low level gain is the main volume when using the low level input. (AV) This will not operate whilst using high level input.





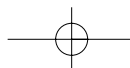
## Running In

Permanent damage may be caused by running the unit at high volume levels from the start. Both the electronics and the drive unit will benefit from an initial running in period of around 24 hrs actual use. This running in period will improve overall performance and prolong the units life.

## Design History

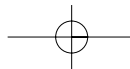
Rega Research has been producing high quality hi -fi equipment for over 27 years. In order to produce a sub woofer of this quality we have been working closely with Tom Pearce of **BK electronics** - one of the most established sub woofer designers in the country.

The drive unit used in the **Vulcan** is exclusive to Rega Research and was specifically designed for use within the 13 litre cabinet design. It demonstrates an exceptionally long throw and incorporates a double magnet system which allows such a small unit to produce such a powerful performance.



## Specifications

<b>Type</b>	Vulcan
<b>Enclosure Volume</b>	13 Litres Sealed
<b>Drive Unit</b>	200mm long throw magnesium chassis
<b>Input Connectors:</b>	
High Level	Professional Switchcraft HPC Series
Low Level	Gold plated phono
<b>Gain Control Range:</b>	
High Level	Zero to 37db
Low Level	Zero to 57db
<b>Amplifier Power</b>	100 Watts RMS / 200 Watts peak
<b>Protection Systems</b>	1) Output short circuit protection, 2) DC loudspeaker protection, 3) Thermally fused, 4) ASP : Automatically reduces amplifier gain if amplifier is overdriven.
<b>Input Impedance</b>	
High Level	100k Ohms (unbalanced)
Low Level	10K Ohms (unbalanced)
<b>Frequency range</b>	17Hz to 240Hz (Dependant on frequency setting) Up to 3KHz in processor position



<b>Phasing Position 1</b> (left)	Positive Input / Forward Movement
<b>Phasing Position 2</b> (right)	Positive Input / Reverse Movement
<b>Mains Input Voltage</b>	230v AC 50-60Hz (UK) 110v AC 50H-60Hz (US Spec)
<b>Dimensions</b> (Cabinet only)	280 mm x 280 mm x 280 mm
<b>Dimensions</b> (inc feet)	350 mm x 280 mm x 280 mm
<b>Weight</b>	12.2 Kg
<b>Fuses</b> (Spares in fuse holder)	1.6 AT 20mm Glass 3.15 AT 20mm Glass
<b>Supplied Accessories</b>	5m Phono Cable / Mains Lead

### Owners Log

(1)  
 Owner.....  
 Date.....  
 Where Purchased.....  
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(2)  
 Owner.....  
 Date.....  
 Where Purchased.....  
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(3)  
 Owner.....  
 Date.....  
 Where Purchased.....  
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