

REL ACOUSTICS LIMITED

Strata

Sub-Bass System

OPERATING MANUAL

REL ACOUSTICS LIMITED

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WELCOME

Thank you for buying the REL Strata Sub-Woofer. We hope that it will give you many years of pleasure. We have taken a lot of care over its design and, to get the maximum benefit from your Strata, we strongly recommend that you read this manual carefully prior to use.

WARRANTY

Strata is covered by a two year warranty (United Kingdom mainland only). This warranty covers both parts and labour. Obviously, physical and electrical abuse or misuse is not covered by the warranty.

Overseas buyers should check with their local retailer or distributor regarding applicable warranties.

In the unlikely event that you should experience a problem with your Strata, please contact your dealer in the first instance. He will arrange for the return of your Strata, if necessary.

SERVICE AFTER WARRANTY

Please contact your dealer in the first instance and before returning any goods. The goods must be returned at the sender's expense and risk. After repair, the cost of return will be included with any invoiced charges.

CONNECTING UP

Switch off your system before disconnecting any wires. Screw the spikes into the steel inserts already fitted into the feet of the sub-woofer and level them up, compensating for an uneven floor, if necessary. It is not essential nor is it desirable to over tighten these spikes. Use the locknut to ensure that the spike cannot work loose..

There are two, entirely separate, methods of connecting your Strata to your system.

The first uses the signal at the loudspeaker outputs on your power amplifier. With this method, simply connect from your power amplifier loudspeaker terminals to the 4mm sockets on Strata, keeping the left and right channels separate. This method also allows you the option, if desired, of connecting your main loudspeakers via the sub-woofer. If you do choose to connect your loudspeakers via Strata, then the bass to these loudspeakers will be cut, depending upon which pair of outlets you use. The actual bass cut will also be dependent upon the impedance characteristics of your loudspeakers. This method is only recommended where the main loudspeakers are very small and of the so-called "satellite" variety, and are likely to suffer if called upon to handle high volume programmes containing prolific deep bass. For critical listening with quality loudspeakers, it is better to leave your main loudspeakers connected directly to your power amplifier.

The alternative method of connecting Strata is by the phono sockets. Either one, or both, can be connected to your system's sub-woofer outlet (if filled), or to your television's headphone socket. This latter method is a very convenient way of improving your television sound quality. If you have a spare pair of pre-amp sockets, then these can be used. Again, connect these to the phono sockets on Strata. A five metre phono-to-phono screened lead is included. Your dealer will advise you about changing this if your system is incompatible. Please note that, if the phono sockets are used for the input, there will be no output from the 4mm sockets for satellite loudspeaker connection. After connecting up your signal leads, connect the mains lead to Strata and to the mains and switch on.

SETTING UP AND RUNNING-IN

SETTING UP

Initially, test the action of the controls with the Strata sited in any convenient position in your listening room.

Turn the two filter controls fully clockwise (maximum bandwidth). Play some music with a known bass content, and then adjust the gain control for similar sound levels from your main system and your sub-woofer. Now reduce both of the filters to the minimum position. Notice that the level of the bass has almost disappeared. This is because these very low frequencies are not being boosted by your room. Without the Active Bass Controller (ABC) you would never be able to hear them properly in your room. Increase the gain control until this deep bass is heard. Slowly increase the coarse control, one step at a time. If one position appears to be too much, reduce the control to the lower setting, then increase the fine control, one notch at a time, until there is a good match between the two systems. It may be necessary, also, to re-adjust the gain control. With listening experience, it will soon be obvious which setting sounds best in your room and for your system. One other major benefit of a REL sub-woofer is that, if you move house or change your system, you can immediately re-adjust the controls for the best sound again.

It may take several days before you are completely satisfied that you have found the final best setting. Your acuteness and ability to perceive very subtle differences will improve over these days, possibly because you may not have previously had the opportunity to hear very deep bass in your room. If the bass sounds too prominent, simply reduce one of the filter controls a notch. If there is a "hole", increase one of the filter controls until it is filled in.

It is often surprising just how much effect the room is having on the bass response. Sometimes, even quite small loudspeakers appear to need very low settings of ABC. If this is the case, accept it and feel pleased that your stereo imaging extends down so far. It is always better to try and set up for a subtle, rather than an overblown effect if possible. However, personal taste is the over-riding factor here. If it suits your ears, it is correct.

REL sub-woofers are, so far as we know, the only available sub-woofers that attempt to address the problems of very deep bass reproduction and matching in any sized room. Until now there has been very little if any attempt by any loudspeaker manufacturer to help people, particularly those with smaller or "difficult" rooms, to obtain truly satisfactory loudspeaker/room matching in the bass.

Strata is designed as a true sub-bass loudspeaker. It is designed to reproduce those exceptionally deep notes that are felt, rather than heard. This it will attempt to do at whatever volume you set on the gain control on its panel. If set too high, the cone will simply run out of movement with the lowest notes, causing a "crack" to be heard. If this warning is not heeded and the unit is continuously played in this manner, permanent damage will be done to the driver. This damage is NOT covered by Warranty. Always try and adjust for a seamless integration with your main loudspeakers. This will ensure correct settings and minimise the risk of driver damage.

Strata is non-critical of positioning. For the loudest and deepest bass, however, it is best positioned with its back to the wall, or even in a corner.

RUNNING-IN

Care taken over the running in will be rewarded with many years of pleasurable use. Both the electronics and the drive units will benefit from an initial period of carefully controlled use. During this period, permanent damage can be sustained by running the unit at too high a volume setting. Conversely, by taking a little care over this initial period (about 12 hours of use), a longer life with a higher potential eventual performance is assured.

CARE OF YOUR STRATA

The high quality finish of Strata is easily cared for by the occasional wipe over with a damp cloth. Alternatively, a soft bristled brush may be used to sweep off any dust which falls on the surface. If objects are placed upon the top of the unit, it is advisable to use a small mat to protect the surface and to avoid the risk of any rattles.

Everything about Strata has been designed and engineered to last a lifetime.

DO'S AND DON'TS

1. Always protect the sub-woofer from getting wet.
2. Always ensure that the panel is correctly earthed via the three-core mains cable. It is not sufficient to rely upon the earth being made via the signal ground.
3. If the mains lead is lengthened (or shortened), make absolutely certain that the wires are correctly terminated before switching on.
4. In the unlikely event of a fuse failure, always replace the fuse with an identical one, with the same rating and characteristics. Replacements are available from your supplier.
5. Do not attempt to remove the panel from the enclosure. All Warranties automatically become void if the seals are broken.
6. Never try to remove the drive unit from the enclosure. Doing so will render the Warranty void.
7. Never try to force the switches or the gain control around further than their natural stops.
8. Do not try to modify or "improve" the design by attempting to place objects into the reflex port.

It is not necessary to switch off the unit between listening sessions. It will not significantly shorten its life by leaving the unit on. On the other hand, neither will it harm the sound quality if it is always switched off. The power consumption in the quiescent state is negligible.

It is perfectly safe under all normal domestic circumstances as it is fully protected.

ACTIVE BASS CONTROLLER SWITCH VERSUS CROSSOVER FREQUENCY

These settings determine the commencement of the upper frequency limit of the sub-woofer. The lowest operating frequency is totally unaffected by these switches. The four steps on the fine control are equal to one on the coarse.

COARSE SWITCH POSITION	FINE SWITCH POSITION	FREQUENCY Hz
1	1	30
1	2	33
1	3	36
1	4	39
2	1	43
2	2	47
2	3	52
2	4	57
3	1	62
3	2	67
3	3	73
3	4	80
4	1	90
4	2	100
4	3	110
4	4	120

SPECIFICATION

TYPE	REFLEX extended response
ENCLOSURE VOLUME	40 litres
INPUT CONNECTORS	4mm sockets or phono sockets
GAIN CONTROL RANGE	40dB
AMPLIFIER TYPE	DC coupled complementary Mos-Fet
INPUT IMPEDANCE	100K (4mm), 20K (phono)
POWER OUTPUT	60 Watts R.M.S.
DRIVE UNIT	Magnesium chassis, long throw 25cm
FREQUENCY RANGE	20-120Hz (upper frequency dependent upon user settings of ABC. Lower limit is room dependent).
PHASING	Positive, or reversed.
MAINS INPUT	110 or 240 Volts, switchable (mains via fused I.EC socket).
DIMENSIONS	416 x 518 x 310mm (W x H x D) 16 1/2" x 20 1/2" x 12" (approx.).
WEIGHT FUSES	17Kg, 371bs.
SUPPLIED ACCESSORIES	1 x 2 Amp semi-delay, mains input (spare fuse in sliding draw). (1) Mains lead; (2) 5 metre phono interconnect; (3) Operating manual; (4) Set of spikes.

MAJOR FEATURES

- (1) Bass extension to below audibility.
- (2) Active Bass Controller (ABC) to optimise system/room matching.
- (3) Choice of high or low level inputs.
- (4) Bass cut facility to satellite loudspeakers, if required, when high level input is selected.
- (5) Phase reversal switch.

In the interests of product development, REL Acoustics Limited reserves the right to vary this specification without notice.

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