

Dynavector SuperStereo Adapter

DV SS Adp-3

Operation Manual

CONTENTS

Introduction	2
Speaker Positioning	3
Controls and Functions	4
Installation Method (1)	5
Installation Method (2)	6
Installation Method (3)	7
Listening Adjustments	8
Safety Instructions	9
Terms of Warranty	10



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Introduction

■ SuperStereo

The unique nature of SuperStereo is based on theoretical and practical studies of sound wave propagation. It is basically different to the technology used in conventional type of sound processors or DSP processing and has been widely and critically acclaimed. The Adp-3 is the culmination of 18 years of research effort by Dynavector into how sound actually behaves in enclosed spaces, as in concert halls and recording studios. SuperStereo extends further the pioneering work done in the development of stereo sound reproduction.

In recent years, intense effort has been made to improve the quality of sound reproduction with the use of different formats such as SACD, DVD(A) and with surround sound. But this effort has resulted mainly in producing sound which has higher resolution or, in the case of surround sound, echo type effects where sound of all frequencies is subjected to the same delay. While such surround sound systems may enhance the sound effects from cinema movies and their domestic home cinema counterparts, when used for music reproduction they cannot rival the immediacy and ambience of SuperStereo where analogue, frequency dependent, time delays are used to produce a sound of much greater naturalness. Or as Paul Messenger, the distinguished British audio reviewer put it when writing about the DV Adp-2 in Hi-Fi Choice magazine "it is extraordinarily convincing"....."simply sounds more natural and right than regular 2-channel stereo". The reason for SuperStereo's superiority is that it is based on what actually happens to sound waves in real life. In recognition of its innovation SuperStereo technology has been granted patents world-wide.

■ The advantages of SuperStereo

(1) By using the Adp-3 with a conventional stereo system, it will enhance the sound quality of music played by LP, cassette and tape recorders, CD, SACD or DVD-A and produce a much more realistic and natural performance.

(2) SuperStereo will add more to the enjoyment of the performance than the addition of other ancillary audio equipment. The playback of recorded music in SuperStereo is much closer to that of the live original.

(3) Another characteristic of SuperStereo is that it is capable of bringing out the sound of instruments played through any source with greater accuracy over their frequency range.

(4) SuperStereo can be used not only for reproducing music, but also when playing movies by DVD players in a home cinema system. This is possible regardless of which form of sound recording (including 5.1 sound recording) is applied to the media source. SuperStereo can be used without a Sub-woofer.

(5) SuperStereo can play bass music without a sub-woofer, and the fact that it is capable of producing a quality bass sound even when using only 4 speakers is a further advantage. The difference in the smoothness of the sound of music played using SuperStereo without the unnatural boomy sound of many sub-woofers is readily discernible.

■ Features of SS-Adp3

(1) The Adp-3 is equipped with an internal 24 watts per channel stereo amplifier to drive the sub-speakers so an ordinary stereo system can be transformed into a SuperStereo one simply by adding a set of small speakers.

(2) The Adp-3 is straightforward to install and use so the often complicated adjustment and set-up needed for DSP sound or 5.1 sound is avoided.

(3) The Adp-3 has a choice of 3 presets offering 3 different SuperStereo sound delay characteristics with easy switching between them.

(4) The Adp-3 has an input socket for a pre-amplifier, so is just as easy to use with a separate pre-and power main amplifier or mono-blocs as in a system with an integrated amplifier.

(5) The Adp-3 is also equipped with a processor line output terminal to enable a separate, more powerful amplifier to be used for the sub-speakers if desired.

Sub-speakers and Speaker Positioning

Choice of Speakers

(1) Front Speakers

Your existing front speakers should work well in a SuperStereo system. If you intend to replace your front speakers however, high-performance and smaller size units will give a good SuperStereo performance.

(2) Sub-Speakers

Small speakers with 10-13cm main drive unit are recommended even if large speakers are used for the front speakers. Large speakers are best not used for sub-speakers, as the sound will then tend to be rather bloated or boomy and lack definition. The sealed box type of sub-speaker often gives better results having the advantage that they are acoustically less sensitive to positioning near to room boundaries. However, the bass reflex type will usually also work well and advantage can sometimes be had by using felt to plug the port.

Speakers Positioning

The recommended positions for the two pairs of speakers are shown in figure (1). Please be guided by the following points to ensure that you obtain a SuperStereo performance best suited to your speakers and listening room. It should be noted that good SuperStereo performance can be obtained without the need for great precision in the positioning of the sub-speakers or the need for the listener to be in a particular "sweet spot". The technology is such that, provided the basic guidance is followed, experimentation in the positioning of the sub-speakers will enable the most life-like and pleasing sound to be obtained for a particular listening environment.

● **A pair of sub-speakers should be positioned face-on to the front, main speakers and a little in front of the listening position.**

The recommended listening position is behind the line joining the 2 sub speakers. Most positions behind the line are likely to be fine thus enabling a number of listeners to enjoy the benefits of SuperStereo sound. It is best if the distance between the left and right sub-speakers is rather greater than that of the front speakers and, as previously mentioned, the sub-speakers should be located face-on to the front speakers. This is because the effects gained by having the 2 sets of sounds collide and mix form an important part of SuperStereo (in contrast to the positioning of sub-speakers used for other types of sound systems which conventionally face towards the listening position). To enhance this mixing effect, the sub-speakers can be angled in so that they "fire" directly at the front speakers.

● The height of the sub-speakers is not critical and can be adjusted to suit room layout and personal preferences. Typically they will be at about the same height as the mid unit of the front speakers, but they can be either lower down and firing upwards, or higher up and angled to fire downwards towards the front speakers. Please choose the best location suited to the size and type of your listening room.

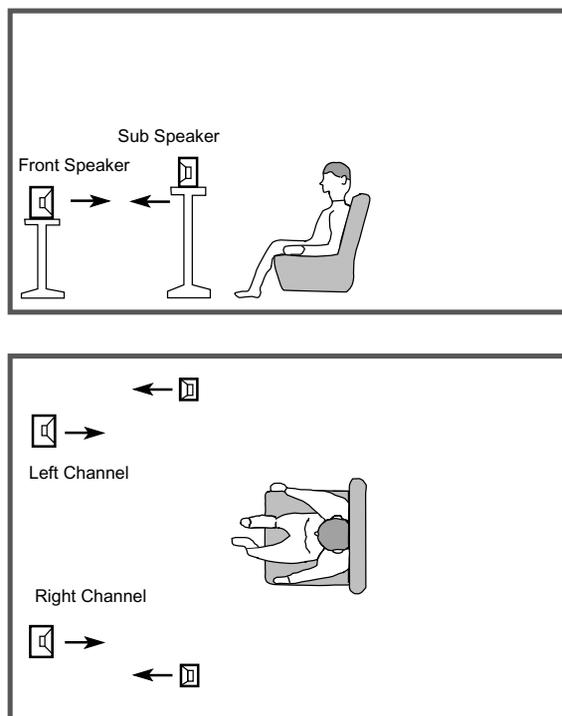
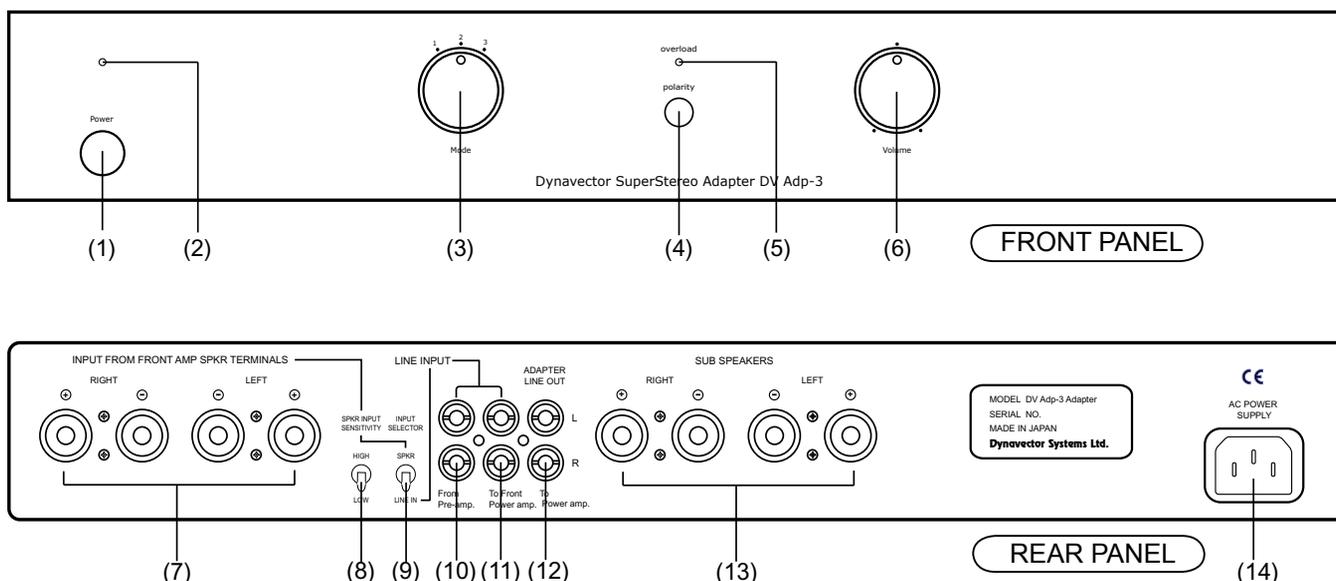


Figure (1)

Controls and Functions



(1) POWER

Press the Power button to turn on the unit.

(2) POWER INDICATOR LAMP

The LED (green light) indicates that the power is on.

(3) MODE

Three modes of SuperStereo are selectable. Choose the one best suited to the type of music being played, the recording acoustic and your personal listening preferences.

(4) POLARITY

When the position of the switch is changed it reverses the polarity of the sub-speakers against that of the front speakers. Both the size of the sound stage and the degree of bass sound will be changed. Choose the one best suited to the recording and your listening room.

(5) OVERLOAD INDICATOR

The red light will either blink or remain on when the signal level to the input is too high. The occasional blink can be disregarded, but beyond this you should reduce the volume of the main amplifier or change over the Speaker Input Sensitivity (8) from HIGH to LOW.

●NOTE: LED will show briefly whenever the Power button is turned off or on. This is normal and does not indicate a fault.

(6) VOLUME CONTROL

This adjusts the volume of the sub-speakers. Turning to the right increases the volume and SuperStereo effect.

(7) INPUT FROM FRONT AMP SPK TERMINAL

Input terminals for signal from speaker terminals of integrated amplifier. (The existing pair of speaker cables to be used for the signal from the integrated amp to the front main speakers).

(8) SPKR INPUT SENSITIVITY

Select the HIGH position of the input level switch. However, if the OverLoad Indicator on the front panel continually flashes or remains on the input is too high and you should select the LOW position of the input level switch.

(9) INPUT SELECTOR

When the Input signal is taken from the speaker output terminals of the front amplifier, this switch should be in the upper position. When the Input signal is taken from the output of the pre-amp, the lower Line In position should be used.

(10)(11) LINE INPUT

These 2 Line Inputs are provided. Where a pre-amp is being used which has 2 pre-amp outputs, one output should be connected to the Line Input terminals (10). The other pre-amp output should be connected directly to the input terminals of the power amp.

When the pre-amp has just 1 set of outputs, the second Line Input (11) can be used as a 2-way adapter. That is, the pre-amp output should be connected to the Line Input (10) and the output from (11) connected to the power-amp.

You should ensure that the LINE position of the Input Selector (9) is selected.

●NOTE: The output signal from (11) to the amplifier(s) for the front speakers is unaltered and is the same as that coming from the pre-amp.

(12) ADAPTER LINE OUT

The output of the SuperStereo signal developed by the Adp3 is taken from these terminals. They are for use when the sub-speakers are to be driven by a separate power amplifier.

(13) SUB SPEAKERS

These terminals provide the SuperStereo output signal for the sub-speakers and are for use with speaker cables.

(14) AC POWER SUPPLY

Connection for the Power Supply cable (supplied). Check that power supply voltage in your area matches that stated on the rear panel of the Adp-3. The Adp-3 should only be operated on the voltage of the area in which it is supplied.

Installation Methods (1)

Connection of the Adp-3 to a Normal Stereo System

Connection of the Adp-3 to a normal stereo system consisting of an integrated stereo amplifier and a pair of loudspeakers. This method also covers installation for those using compact audio systems. A small pair of sub-speakers of reasonably good sensitivity and some speaker cable is required. Ensure that the AC power to your system is switched off and is unplugged from the wall socket. Then:

1. Keep the existing connections between your amplifier and front speakers. Then, using speaker cables of appropriate length, connect one end to the speaker output terminals of your existing amplifier and the other end to the input terminals of the Adp-3 at (7), taking care to observe the correct polarities.

2. Select SPKS (upper) position of the Input Selector (9)

3. Select HIGH position of the Speaker Input Sensitivity switch (8).

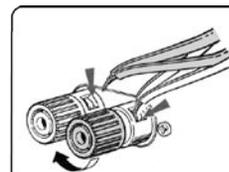
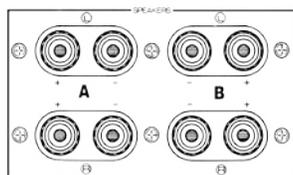
NOTE: Should the Overload Indicator blink frequently when the Adp-3 is in use, select the LOW position instead.

4. Using speaker cable, connect the sub-speaker output terminal of the Adp-3 (13) to the sub-speakers, observing the correct polarities.

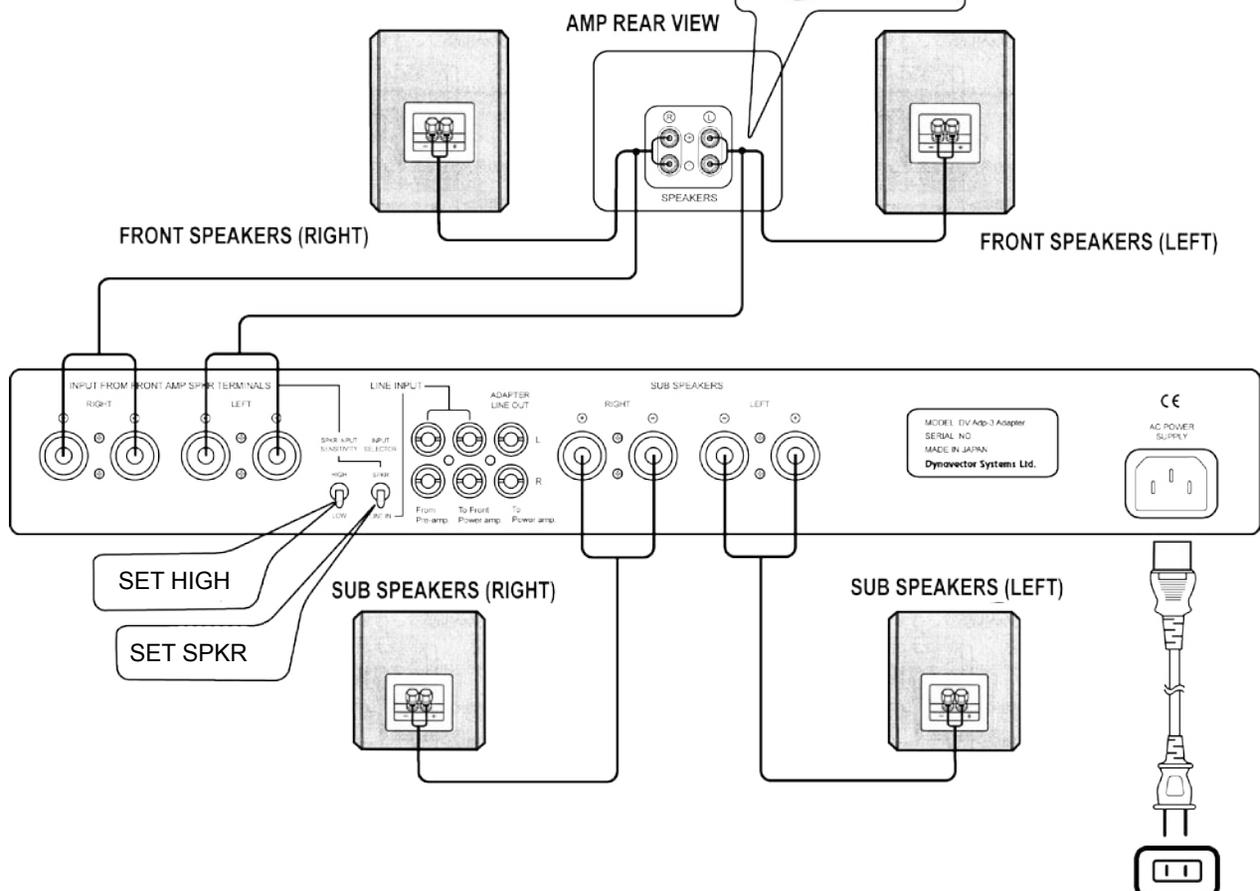
5. When all connections have been made and checked and the sub-speakers placed in position, insert the AC power cord into the unit (14).

Then follow the instructions under "Listening Adjustments" on page 8.

Note: Where an amplifier has 2 sets of speaker output terminals, use one set for the front speakers and the other between the amplifier and the Adp-3 inputs at (7). Where this is done, ensure that the amplifier speaker switch is selected to provide output to both sets of speaker outputs.



Twist the ends of the speaker cables tightly, insert into the speaker output terminals and fasten by turning the speaker output terminal to the right.



Installation Method (2)

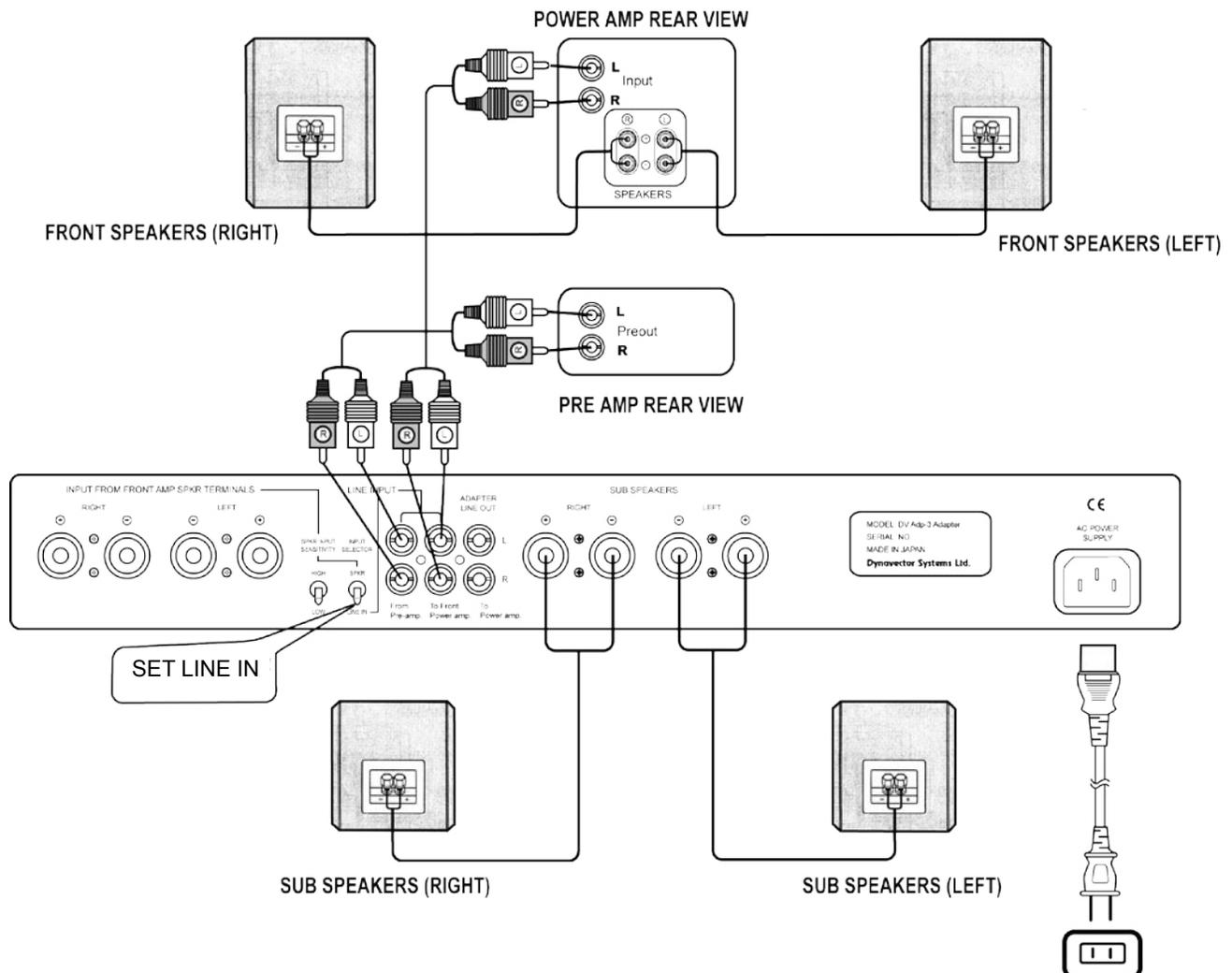
Using a Separate Pre and Power Amplifier

Turn off the AC power to all stereo components and unplug the AC power cords from the wall socket. Then:

1. Where the pre-amplifier has 2 sets of output terminals, use one set to connect it to the power amplifier for the front speakers using the usual RCA phono inter-connects. Then use the second set of output terminals with similar inter-connects to connect the pre-amp to the Line Input terminal (10) of the Adp-3.
2. Where the pre-amplifier has only one set of outputs, connect the output to the Line Input Terminal (10) of the Adp-3 and the Line Input Terminal (11) to the power amplifier to provide the signal for the front Speakers.
3. Put the LINE IN selector switch (9) in the lower position.
4. Using speaker cable connect the sub-speakers to the Adp-3 Sub-Speaker Terminals (13) observing the correct polarities.
5. When the above connections have been made and checked, insert the AC power cord (supplied) into the power socket at (14).

Then follow the instructions under "Listening Adjustments" on page 8.

NOTE: the output signal from (11) which goes to the power amplifier is not altered and is the same as that from the pre-amp.



Installation Method (3)

When using a separate power amplifier with Adp-3 to drive the sub-speakers and the existing stereo system consists of separate pre and power amplifiers.

The method may be used when greater power is required for the sub-speakers e.g. when low sensitivity sub-speakers are used, or the system is to be used in large rooms and at high volume.

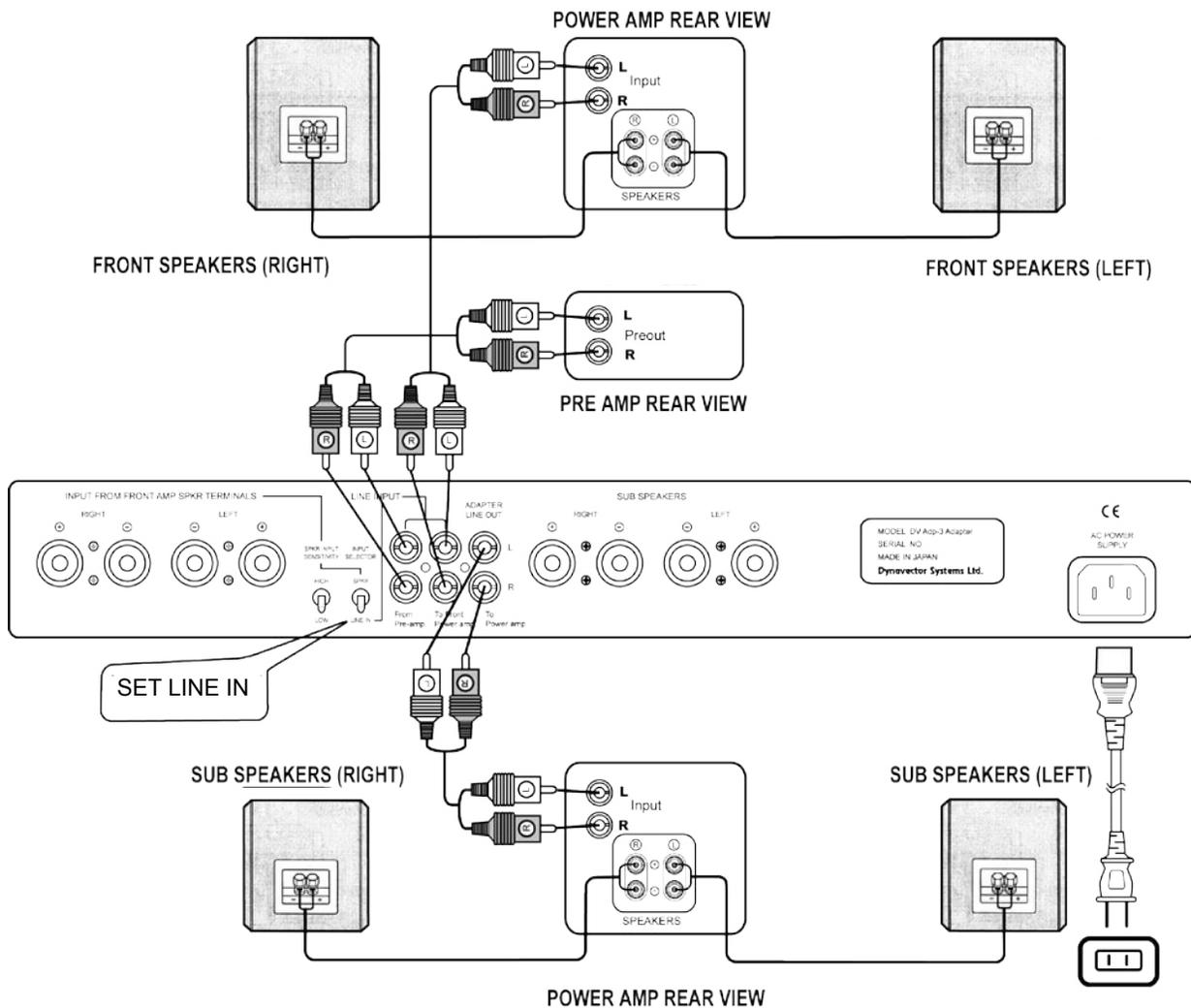
First ensure that all equipment is turned off and the AC power cords unplugged from the wall socket.

Then follow steps 1-3 as in Method (2) above.

- Then follow the instructions under "Listening Adjustments" on page 8.

- Next connect the separate power amplifier to be used to drive the sub-speakers to the LINE OUTPUT terminals at (12) of the Adp-3 using the usual inter-connects.

- Then connect the sub-speakers to the sub-speakers output terminals of the Adp-3 using speaker cable observing the correct polarities.



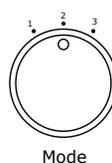
Listening Adjustments

After further checking to ensure that all connections have been correctly made, push the AC power switch of the Adp-3 to turn on the unit and turn on the pre-amplifier/amplifier. You now need to adjust the sound balance between the main and sub-speakers as follows:

1. Turn the VOLUME control at (6) to a minimum.



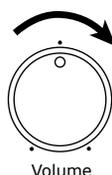
2. Select position 2 of the MODE control at (3).



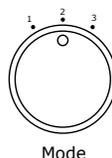
3. Adjust the volume control on your main amplifier so that the sound level from the front speakers is a little below that at which you would listen to for ordinary 2-channel stereo

4. Turn up the VOLUME control (6) of the Adp-3 slightly and check to ensure that sound is coming from both sub-speakers.

5. Increase the VOLUME of sound from the sub-speakers to a level where the best SuperStereo effect is had. Usually, this is the point where the sound level from the sub-speakers is about the same or slightly greater than that from the front speakers. Continue to adjust the sound levels from the front and sub-speakers to get the most pleasing SuperStereo sound.



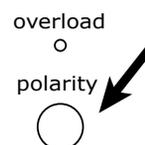
6. After adjusting the sound balance to your liking, try out different positions of the MODE (3) control and choose the one best suited to your room acoustics, the nature of the recording and your own personal preferences.



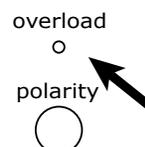
7. You can adjust the overall sound level using the volume control of the pre-amp or integrated amplifier which now becomes the master volume control.

Polarity Adjustment

The polarity switch at (4) on the front panel changes the polarity of the sub-speakers. Choose the position which gives the fullest and most natural bass.



Overload Indicator



Should this indicator blink more than occasionally, turn down the volume of your main amplifier and the Adp-3 to a minimum and select the LOW position of the INPUT SENSITIVITY switch at (8) on the rear panel. Then re-adjust the volume controls to your preferred listening levels.

Mode Control

The MODE control allows a choice of SuperStereo characteristics.

Typical positions are:

MODE 1 for rock and jazz, MODE 2 for classical music and MODE 3 for church music.

The 3 different delay patterns for SuperStereo allow a closer match to the performing or recording venue to be obtained.

- Position 1 has time delays for a small hall or intimate jazz club. It can also be used when listening to solo instruments or a group of performers in a small hall.

- Position 2 is appropriate for venues rather larger than 1 and for many users this will be the position used most often.

- Position 3 is for large halls. The choice of mode will also be influenced by the conditions of the recording (or broadcast) so that music played in an empty reverberant hall may sound more natural when a lower mode position is selected. When listening to radio plays, news broadcasts and other spoken, non-musical material, you should turn the volume of the Adp-3 to a minimum.

Safety Instructions

Taking care of your ADP-3 Adapter

1. Ventilation - Be sure to locate the Adp-3 in areas where there is reasonably good air circulation..
2. Water and Moisture - The Adp-3 should be kept dry at all times. To prevent fire or shock hazard, do not expose the product to any form of moisture.
3. Heat - The Adp-3 should be situated away from heat sources such as direct sunlight, radiators, fires, stoves or any other appliances which produce heat.
4. Power Sources - The Adp-3 should only be operated on the voltage of the area in which it is supplied.
5. Cleaning - A regular dusting with a soft, non-abrasive cloth will generally keep the finish of the faceplate and chassis looking like new. Do not use liquid or aerosol cleaners; they may damage the circuitry and cause damage which will not be covered under your warranty.
6. Servicing - Refer to your authorised Dynavector SuperStereo supplier for all servicing needs.
7. There are no user serviceable parts within the unit and removal of the chassis cover may void the warranty.

Specifications

- Model
Adp-3 analogue/digital SuperStereo processor with 2ch power amplifier
 - Impedance
LINE IN 50K ohms
SPEAKER 300 ohms
 - Input Voltages
Overload warning indicator level
LINE IN 1.0 volt
SPEAKERS INPUT SENSITIVITY
HIGH 10.0 volts (approx.)
(= front speaker output: 4 ohms 25 watts)
LOW 20.0 volts (approx.)
(= front speaker output: 4 ohms 100 watts)
 - Output Voltage
ADAPTER LINE OUT 4.0 volts
(load impedance >10 K ohms)
 - Speaker Impedance
4 - 8 ohms
 - Amplifier Output
24W+24W 4 ohms load
20W+20W 8 ohms load
(500 Hz consecutive actual value)
 - Mode
3 SuperStereo modes selectable
 - Reverberation
SuperStereo analogue/digital feedback gain
 - Polarity
Polarity of sub-speaker is reversible against front speaker
 - Power supply requirement
AC 100 / 115 / 220-240 volts 50/60 Hz,
according to market
 - Power consumption
90 VA
 - Dimensions
430W x 70H x 282D mm
 - Weight
6.2kg(approx.)
 - Accessories
- Sub-speakers cable (1m x 2, 7m x 2)
- AC power cord
- Warranty card
- Operation manual
 - Safety Compliance
complies with EN 60065
 - Country of Origin
Made in Japan
- ⌘ In the interests of product development, Dynavector reserves the right to change specifications at any time.

DYNAVECTOR SUPERSTEREO ADAPTER ADP-3
TERMS OF WARRANTY

This processor has been carefully tested during production and before final dispatch. In the unlikely event of a fault occurring, the supplier undertakes for the original purchaser to repair it without charge for parts or labour or, at his discretion, replace the processor during the period 12 months from the date of purchase, subject to the conditions and exclusions given below.

To benefit from the terms of this guarantee, the processor must have been used in accordance with the manufacturer's instructions and the purchaser is required to return it at his expense and in secure packaging to the supplier,

Dynavector shall not be liable to repair or replace the processor under the terms of the guarantee where:

- a) the fault is judged to have been due to accidental use, misuse, power surges, damage in transit or where it has been used contrary to the manufacturer's instructions.
- b) repairs have been attempted by a person other than Dynavector's own service staff, or other authorised personnel;
- c) where the processor has been used for hire purposes or non-domestic use;
- d) the processor has been used on a voltage supply other than that stipulated .

This guarantee does not confer any rights other than those expressly set out above and does not cover any claims for consequential loss or damage. This guarantee is offered as an additional benefit and does not affect your statutory rights as a consumer.

Warranty Card

Type DV-SS- ADP-3 _____

Serial No. _____

Purchase date _____

Name _____

Address _____

Dynavector Systems Ltd.