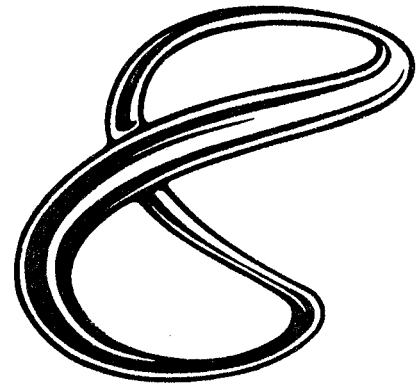


infinity®

OWNER'S MANUAL
for your
Infinity RS Series
Subwoofer

ATTENTION!

This unit is set up for 110 volt A.C. operation. *Please check your line voltage before plugging the unit in.* If your line voltage is different than 110 volts, change the voltage setting and fuse as described in this manual.

ATTENTION !

Cette unité est réglée pour fonctionner sur une tension secteur de 110 volts. *Avant de la brancher, veiller à vérifier la tension du secteur.* Si elle est différente de 110 volts, changer le réglage et le fusible comme décrit dans ce manuel.

ACHTUNG!

Dieses Gerät ist für 110 V Wechselstrom-betrieb ausgelegt. *Bitte vor dem Anschliessen die Netzspannung prüfen!* Ist die Netzspan-nung nicht 110 V, Spannungseinstellung und Sicherung ändern. Anleitung s. Handbuch.

It is recommended you read these instructions thoroughly before attempting to operate your Infinity RS subwoofer. Please save this manual for future reference. Also save your bill of sale in case you need it for warranty service.

UNPACKING

Check your subwoofer carefully. If it has been damaged in transit, report the damage by calling your dealer and/or the trucking firm that delivered it immediately.

To prevent fire, or shock hazard, do not expose this subwoofer system to rain or excessive moisture. To avoid electrical shock, **DO NOT OPEN THE SUBWOOFER!** There are no user serviceable parts inside. Observe all warnings and cautions.

SOME SUGGESTIONS

It is advisable not to operate your speakers, or subwoofer, with the bass, treble and loudness controls set to full boost. This will place undue strain on the speakers and could damage them.

The volume control setting on your preamplifier or stereo receiver is not a specific indication of the overall loudness level of the speakers. The only important consideration is the loudness level at which the system can be played regardless of where the volume control is set.

Always turn down the volume control when changing a record, or switching inputs to AM, or FM operation. Excessively loud transients (clicks, or popping sounds) can damage the satellite speakers and possibly the subwoofer.

Whenever changing cables, pulling plugs, etc., ALWAYS TURN OFF ALL EQUIPMENT, including the RS subwoofer. This prevents transients from entering the speakers and prevents electrical energy from reaching you. Keep all connections out of the reach of children.

ABOUT THIS PRODUCT

The Infinity RS Subwoofer has been designed to enhance the bass frequencies of any audio system. The subwoofer may be used with speakers of any size ranging from 4 inch woofers up to 12 inch models. Obviously, the greatest bass enhancement will be achieved when the subwoofer is connected with speakers which do not have the capability to create deep bass. The subwoofer may be used individually, or combined with another RS Subwoofer for even more impressive reproduction of bass frequencies (i.e., one subwoofer near the satellite speakers and a second subwoofer behind the primary listening area, or both subwoofers up front).

The RS subwoofer is a self-powered system utilizing a 100 watt, solid-state, servo-controlled low-frequency monophonic amplifier driving a specially designed 10" woofer mounted within a structurally rigid, non-resonant sealed enclosure. The amplifier's power supply can be used with various alternating current voltages and frequencies. A voltage selector plug is located on the amplifier plate to select the required voltage for your location. An A.C. line fuse, located within the voltage selector, will protect the electronics from damage in the event of an internal failure. A special thermal fuse is also employed within the power transformer to protect the electronics against heat buildup in the power supply. Once this internal fuse opens (only in rare cases) the entire transformer must be replaced. Contact the Infinity Customer Service Department if this happens.

POSITIONING

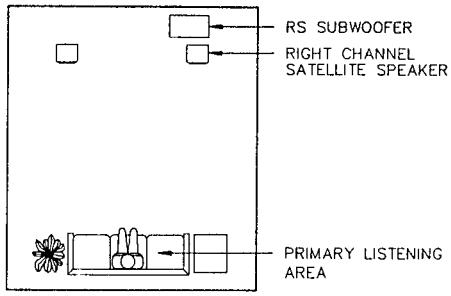
Since the installation of a subwoofer is somewhat more complicated than installing full range speakers, it is advisable to read this section very carefully prior to connecting the subwoofer to your system. If you have questions relating to your installation, it is advisable to call either your dealer, or Infinity Systems for advice.

The performance of the RS Subwoofer is directly related to its placement in the listening room and how you align the subwoofer with its satellite speakers. Setting the volume of the subwoofer in relationship to the left and right speakers is also of critical importance because it is essential that the subwoofer integrates smoothly with the entire system. Setting the subwoofer's volume level too high will result in an overpowering, boomy bass. Setting the volume level too low will negate the effect of the subwoofer.

It is generally believed by most audio authorities that low frequencies (below 100-200 Hz) are non-directional and, therefore, placement of a subwoofer is not critical. While in theory it is true that extreme low-frequencies are non-directional, the fact is, however, when installing a subwoofer within the limited confines of a room, reflections, resonances, standing waves and absorptions generated by the room will strongly influence the performance of the subwoofer system. Moving the subwoofer as little as an inch or two from side-to-side, or front-to-rear may add, or detract from bass intensity, or clarity. Placement of the subwoofer in a corner may increase bass output enormously (the corner acting as an extension of the speaker essentially creating a low-frequency horn) and this may prove to be an undesirable location. If there is a necessity for increasing bass output, then a corner may prove to be a valuable aid.

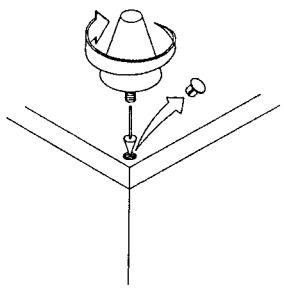
It will take time and patience to find the most pleasing acoustic location for your subwoofer. Testing for sonic balance and blending should always be made from your normal listening position using a wide range of source material. As a suggested starting point, begin with your RS Subwoofer behind your right-channel satellite speaker, about 3 or 4 inches from the wall. (We suggest trying this location first because in a live orchestra the bass instruments are usually located in the back to the right.) Refer to figure 1.

Figure 1:



The RS Subwoofer's preferred method of installation is with its metal bottom plate facing down, although it may be installed on its side or end if desired. When installed with its metal plate down, remove the 4 hole plugs from the enclosure (one from each corner) and screw the four large feet provided into the threaded holes. See figure 2.

Figure 2:



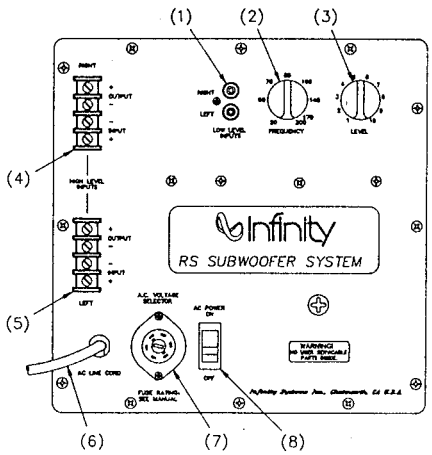
The metal plate acts as the heat sink for the subwoofer's internal amplifier: do not place pillows, or other objects against it.

It is recommended to place the RS subwoofer at least 2 to 3 feet away from a television, or a computer's disc drive system to prevent smearing the colors of the T.V. picture, or erasure of the magnetic disc.

INSTALLATION

Refer to figure 3 to identify the controls of the subwoofer's internal amplifier:

Figure 3:



(1) Low Level Input jacks: connect to preamp outputs
(2) Frequency: controls upper corner roll-off point
(3) Level: controls volume of subwoofer
(4) High Level Input/Output terminal strip, right channel
(5) High Level Input/Output terminal strip, left channel
(6) A.C. Line Cord
(7) Voltage Selector switch/A.C. line fuse
(8) A.C. power switch

Turn off the electronics in your entire audio system prior to connecting your subwoofer. Make sure the subwoofer's On/Off Switch (8) is in the "off" position.

Verify the correct Voltage Switch (7) setting and fuse rating for your A.C. line current. Ratings for the A.C. line voltage fuse are as follows:

VOLTAGE	FUSE SIZE
U.S.A. 120V/60 Hz	3 Amp slow-blow
100V/50/60Hz	3 Amp slow-blow
220V/50Hz	1.5 Amp slow-blow
240V/50 Hz	1.5 Amp slow-blow

To change the setting of the Voltage Switch, first loosen the fuseholder (located in the center of the switch) by turning it counterclockwise 1/4 turn with a screwdriver blade. Rotate the switch by inserting the tips of a pair of needle-nosed pliers into the indentations (near the "110" and "200" marks) and slowly turn to the desired setting. Replace the fuseholder by pushing it in and turning it clockwise until it locks in place.

Attached to the subwoofer's A.C. line cord is a plastic bag containing spare fuses of both values. Never replace the A.C. fuse with a rating higher than what is recommended. If this is done, protection will be reduced, or eliminated and you may cause damage to your unit. This will automatically void your warranty.

Connect the subwoofer's A.C. Line Cord (6) to your preamplifier's, or receiver's switched A.C. convenience outlet. If required, use a heavy-duty extension cord to reach the outlet. If the switched outlet is 2-prong, use a floater ("cheater") plug between the subwoofer's power cord and the outlet.

If using a switched outlet is not feasible, plug the subwoofer into any household A.C. outlet. The subwoofer draws very little current when it is not playing, so it may be left on without consequence. It is advised, however, to turn the subwoofer's power switch OFF if the system is not to be used for more than a few days.

There are a number of ways to connect your subwoofer. Read these next few paragraphs carefully before you decide which method is most suitable for you.

1. The subwoofer can be fed directly by a low level signal from your preamplifier's output jacks by using a spare set of output jacks on your preamp, if it is so equipped (see figure 4a), or by using a "Y" connector if your preamp has only one set of outputs (see figure 4b). Use standard shielded leads terminated at each end with a male RCA connector. Connect one end of each stereo pair of leads to your preamplifier output (left and right) and connect the other end to the corresponding Left and Right Low Level Input jacks (1) on the subwoofer. (First remove the rubber caps from the jacks and save them in case of future need.)

Note: When using an all-tube preamplifier, it is *not* recommended to use the low-level method of connection if the leads going from the preamp to the subwoofer will be longer than 10 feet (3 meters). An all-tube preamplifier may not be able to handle the capacitance introduced by leads over 10 feet long.

Figure 4a:

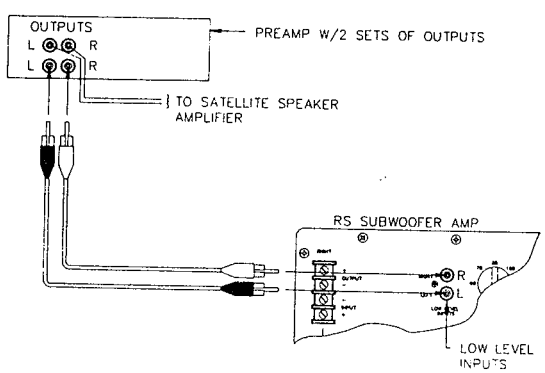
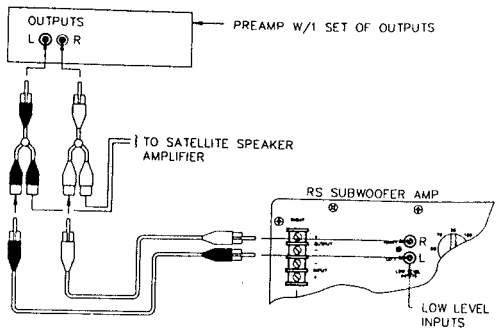
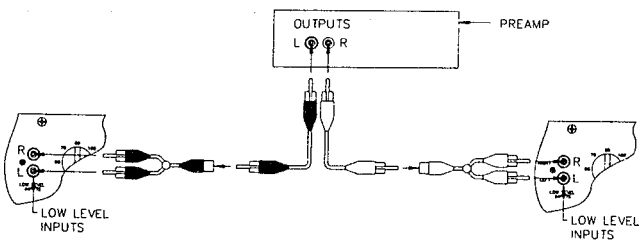


Figure 4b:



When using a single subwoofer, you *must* use a stereo pair of low-level leads from your preamp's outputs. When using two subwoofers, one for each channel, connect the left-channel preamp out to *both* the Left and Right Low Level Input jacks of the subwoofer on the left by using a Y-connector at the subwoofer's amplifier, and the right-channel preamp out to both jacks of the subwoofer on the right in the same manner. See figure 5.

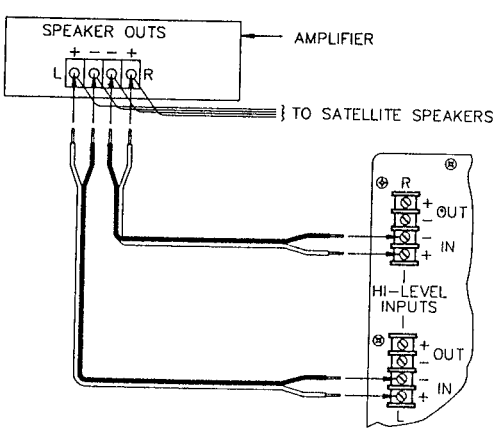
Figure 5:



2. The subwoofer may be connected by using its High Level Inputs (4, 5) in a number of ways. Leave the rubber caps over the Low Level input jacks when using the high level inputs, regardless of which method of connection you choose. You may use wires as thin as 22 gauge for these connections. Maintain proper polarity (+ to +, – to –) at all connections.

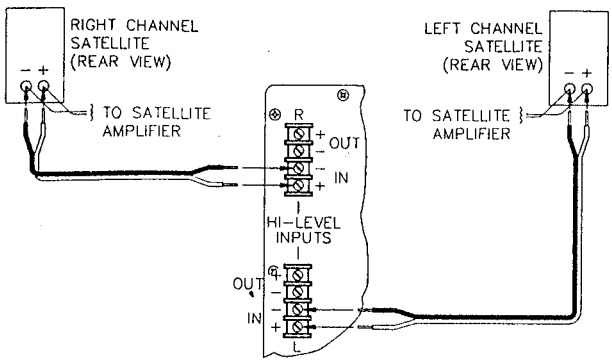
If your subwoofer is near your power amplifier/receiver, and the amplifier's speaker outputs are readily accessible, you can connect the speaker outputs to the high level inputs of the subwoofer as shown in figure 6.

Figure 6:



3. If suitable, the subwoofer may be connected to the terminals of the satellite speakers, as shown in figure 7.

Figure 7:



The RS Subwoofer has a special L/C (inductor and capacitor) filter built into the system which will roll off the satellite speakers at approximately 150 Hz. This feature enables the satellites to play with greater loudness and lower distortion because they no longer have to reproduce low frequencies below 150 Hz. Small speaker systems employing 5, 6 and even 8 inch woofers are generally very hard pressed to create low bass due to the small cone area which must couple to the air. It is, therefore, necessary to make the small cone move in long excursions so it couples with and moves enough air to reproduce bass frequencies. Long excursions, even when a speaker is designed to handle them, often create distortion which influences not only bass clarity, but midbass and lower midrange as well.

To employ the L/C filter, locate the two shorting straps in the plastic bag attached to the subwoofer's A.C. line cord and install them across the "–" High-Level Inputs as shown in figure 8a. Then connect the speaker outputs of your amplifier to the High Level INPUTS of the subwoofer and the input terminals of your satellite speakers to the subwoofer's High Level OUTPUTS as shown in figure 8b. Use 16 gauge, or heavier wire for these connections.

Figure 8a:

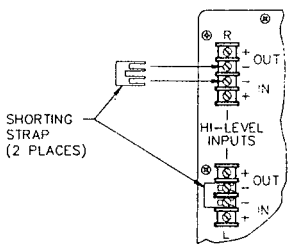
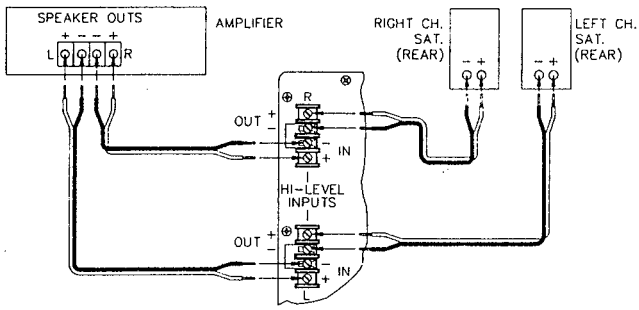
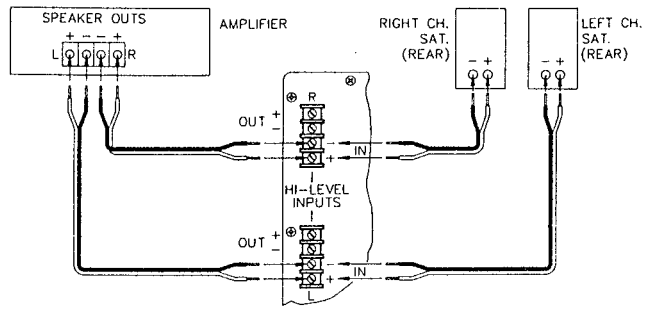


Figure 8b:



If you want to compare the sound of the system with the L/C filter to the way it sounds without the filter, remove the shorting straps from both terminal strips. Next, remove the satellite speaker leads from the High Level "OUT" terminals and connect them to the "IN" terminals, in parallel with the amplifier's speaker outputs. Be sure to connect the LEFT satellite speaker to the LEFT terminal strip, and the RIGHT speaker to the RIGHT terminal strip. Be sure to maintain proper polarity (+ to +, – to –). See figure 9.

Figure 9:



OPERATION

1. Set the subwoofer's Level control (3) to 12 o'clock.
2. Set the subwoofer's Low Frequency Rolloff control (2) to 12 o'clock.
3. Switch the subwoofer's AC power switch (8) to the "ON" position.
4. Turn on your entire audio system.
5. Listen closely to the subwoofer. You should be able to hear a slight amount of noise coming from the speaker. If not, slightly increase the volume control of your preamplifier, or receiver. Carefully turn up the subwoofer's Level control (3) until you hear noise, or slight hum. Now turn the Level control on the subwoofer back to the 12 o'clock position. If you cannot hear noise or hum from the subwoofer, check the A.C. line cord. Is it connected to a "live" A.C. receptacle? Is it making proper contact?
6. Once you know that the subwoofer is active, proceed by playing a record, CD, or cassette — a selection which you know has ample bass information.
7. Set the overall volume control of the entire system to a comfortable level. Begin with the subwoofer's Frequency (2) and Level (3) controls at the 12:00 position. Adjust the subwoofer's Level control (3) until you obtain a pleasing blend of bass. Bass response should not overpower the room but rather be adjusted so there is a harmonious blend across the entire musical range. Many users have a tendency to set the subwoofer level too loud following the belief that a subwoofer is there to produce *lots of bass*. This is not entirely true. A subwoofer is there to *enhance* bass, extending the response of the entire system so the bass can be felt as well as heard. However, overall balance must be maintained; otherwise the music will not sound natural. An experienced listener will set the level of the subwoofer so its impact on bass response is always there but is never obtrusive.
8. The frequency control (2) sets the frequency at which the subwoofer rolls-off, adjustable from 50 to 200 Hz. The setting of this control depends on the low-frequency capabilities of your satellite speakers, system placement, and other factors affecting the mid-bass region. Turn the control UP (clockwise) until you feel there is too much mid-base information (around 100 Hz) then back the control down a bit until that area sounds more natural. If you are pleased with the mid-bass but want to hear more low-bass, turn the Frequency control DOWN a bit and the Level control UP by about the same amount. This will increase low-bass while leaving the mid-bass sounding the same as it did before the adjustment. To get a reduction in low-bass without changing mid-bass, turn the Frequency control UP and the Level control DOWN.
9. Room placement of the subwoofer is the most critical aspect of its installation. It will be necessary for you to try various locations in your listening room before you choose the final location. Some possible starting points include behind the right-channel satellite speaker, along the back wall between the satellites, along a side wall (but not too close to a corner), or behind a couch or a chair.

In general, the closer the subwoofer is to walls and corners, the greater the effect of low-frequency enhancement. Experiment with the Frequency and Level controls in different locations until you are pleased with the results you obtain from your particular application.

WORD OF ADVICE

Either of the subwoofer's Low Frequency Rolloff and Level controls may e set anywhere within their rotation, however, it will be a most unusual rcumstance if you have to set the Level control completely clockwise. This ıay indicate an unbalanced condition in your system (too much bass), or an specially large room, or room placement may not be correct. It would, ıerefore, be worthwhile if you tried several other locations before concluding ıat the Level control must be set at maximum.

In the event that the subwoofer is located so far from the listening area that ; effect is not as prominent as desired, you may find that reversing the phase f the high level input wires may help. Connect the "+" speaker output terminals) the "–" high level input terminals of the subwoofer on BOTH channels. Reversing the phase on only one channel will cancel out the signal to the ubwoofer's amplifier, resulting in NO output from the subwoofer.)

WORD ABOUT TONE CONTROLS

The tone controls on your electronic components (pre-amp, receiver, etc.) ıould be used with the utmost discretion. Excessive boost can create severe ower demands on your power amplifier. Maximum bass boost can create a emand for literally hundreds of watts in the bass region, whereas, in the "flat" osition, or with the tone controls switched out of the system, your average stening level may be impressively and realistically loud at less than 10 watts. he remaining power capacity required is on reserve for power peaks on sharp ansients and powerful crescendos.

ARE OF YOUR SUBWOOFER

Your Infinity subwoofer cabinet is finished with a heavy duty, high quality nyl which requires very little maintenance. Keep the cabinet clean by dusting occasionally with a damp cloth or use a good quality furniture polish to aintain its original luster. (When using aerosol products, always spray the oth, not the speaker, to help prevent any of the product from drifting onto the river or amplifier.)

FEEDBACK

If the bass seems boomy, or you notice a rumbling sound when listening to record albums, the cause may be acoustic feedback. This means that low-frequency vibrations from your speakers are reaching the turntable. To help isolate the turntable from these vibrations, place the turntable on a heavy, solid support, as far away as possible from the subwoofer. If you continue to experience difficulties after some experimenting with placement, consult your Infinity dealer.

IN CASE OF TROUBLE WITH YOUR SUBWOOFER

If the subwoofer sounds distorted, stops playing, or otherwise seems to be malfunctioning, first determine if the problem is in the subwoofer or the wiring and/or other audio components. If the problem also affects the satellite speakers, the cause is most likely in your electronics. If it is only noticed in the subwoofer, make sure that all connecting cables are correct and in proper working condition. Make sure the subwoofer is plugged in and turned on, and check its A.C. line voltage fuse. If everything seems to be in good working order and the subwoofer still malfunctions, DO NOT ATTEMPT ANY REPAIRS! Contact your Infinity dealer and get the name of the authorized Infinity service center near you. If there is no facility near you, contact Infinity's Customer Service department at (818) 709-9400, or write: Infinity Customer Service, 9409 Owensmouth Avenue, Chatsworth, California, 91311 (U.S.A.).

NOTE: DO NOT SHIP YOUR SUBWOOFER FOR SERVICE WITHOUT PRIOR APPROVAL ("RETURN AUTHORIZATION"), AND DO NOT SHIP WITHOUT ENCLOSING A ***COPY*** OF YOUR ORIGINAL BILL OF SALE.

Infinity constantly strives to update and improve existing products, as well as create new ones, therefore, the specifications and constructions details in this and related Infinity publications are subject to change without notice.

LIMITED WARRANTY

Who is protected by the warranty?

Your Infinity Warranty protects the original retail purchaser and all subsequent owners, during the stated warranty period, from any failure as a result of an original manufacturing defect so long as: (1) your Infinity product was purchased within the fifty United States, or purchased by military personnel from an authorized military outlet and (2) the original dated bill of sale is presented whenever service is required during the warranty period. This warranty does not apply to products purchased elsewhere; other purchasers should contact their local Infinity distributor for warranty information.

How long is the warranty period?

	Warranty Period	
Product Type	**Labor**	**Parts**
Electronic Products	1 year	1 year
Speaker Systems	5 years	5 years

What does the Infinity Warranty cover?

Except as specified below, the Infinity Warranty covers all defects in original materials and workmanship. The following are not covered: Damage caused by accident, misuse, abuse, neglect, product modification; damage occurring during shipment; damage caused by failure to follow instructions in your owner's manual, including failure to perform recommended periodic or routine maintenance; damage resulting from repairs by someone not authorized by Infinity; claims based upon any misrepresentations by the seller; and any Infinity product on which the serial number has been altered, defaced or removed.

Who pays for what?

During the period that both parts and labor are covered by this warranty, Infinity will pay all of the labor and material expenses to repair a warrantable defect; during the period that parts ONLY are covered by this warranty, Infinity will pay for all materials to correct a warranted defect, but you must pay for the labor charges.

How can warranty service be obtained?

In the event that your Infinity product requires service, you should first contact the Infinity dealer from whom the product was purchased or if this is not practical, contact us at Infinity (Attn: Customer Service) at 9409 Owensmouth Avenue, Chatsworth, CA 91311 (818) 709-9400. We may direct you to an authorized service center for Infinity products or ask you to send your unit to us for repair. In either case you will have to present your **original dated bill of sale** to establish warranty coverage. Do not send your product to us without prior authorization.

You are responsible for transporting your product for repair and for payment of all shipping charges. However, Infinity will pay the return shipping charges if the repairs are covered by the warranty. If you experience difficulty in transporting your product, please advise us and we may suggest alternative procedures.

LIMITATION OF IMPLIED WARRANTIES: All implied warranties, including fitness for a particular purpose and merchantability are limited in duration to the length of the warranty period for your product.

LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES: Infinity is not responsible for any incidental or consequential damage of any kind. Our liability is limited to the repair or replacement, at our option, of a defective product.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion of incidental or consequential damage, so the above limitations or exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

NOTE: In the event that there is a difference between this warranty and the provisions in your owner's manual, the terms of this warranty will prevail.

Infinity®

We get you back to what it's all about. Music.

INFINITY SYSTEMS, INC. • 9409 Owensmouth Avenue • Chatsworth, CA 91311 U.S.A. • (818) 709-9400 • TLX 188126

930-4234