# Owners Manual for the Infinitesimal IV

#### UNPACKING

Inspect your speakers carefully after unpacking. If they have been damaged in transit, call your dealer or trucking firm that delivered them for instructions on how to file a claim.

#### POSITIONING

Proper positioning of the speakers within the listening room is of primary importance in order to achieve the best possible sound. Room reflections, furniture placement, heavy draperies, window reflections and so on can influence sonic quality, balance and the stereo image. It is essential to experiment with different locations to determine which placement offers the best overall balance and imaging. For the best stereo effect, the speakers should be placed at least 7-10 feet apart (2 to 3 meters). At times, angling the speakers slightly inward toward the listening position will add to overall spaciousness and deliver a more realistic sound stage.

The Infinitesimal IV may be mounted on the wall, or ceiling by using Infinity's special mounting brackets which can be obtained from your dealer. If you place the speakers on the wall and they are higher than ear level, tilt the speakers downward to direct the tweeters toward the listening position. The speakers may also be placed on a table top or any sturdy furniture. When placing the speakers on the floor always use a pedestal, or something similar to keep the speakers from touching the floor or rug. Coupling the speakers to the floor will create a heaviness and smearing of bass frequencies which will interfere with musical integrity.

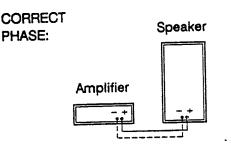
Since the Infinitesimal IV drivers are shielded, the speakers may be installed near your television without interfering with the picture.

### CONNECTING THE SYSTEM Make sure all equipment is turned off before making connections.

Connect your power amplifier to your speakers by using heavy gauge (#16, 14 or heavier) wire with polarity coding. The side of the wire with a ridge or other coding should be considered plus (+). The speakers must be connected in phase (both woofers always moving in the same direction at the same time) and every precaution must be taken to insure proper in-phase hookup (see diagram). If the speakers are out of phase (one speaker moving outward while the other moves inward) the result will be cancellation of bass frequencies and a floating effect preventing instruments and vocalists from stabilizing in their proper perspective.

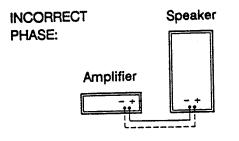
# **PROTECTION CIRCUITRY**

The Infinitesimal IV speakers include special protection circuitry which protects the drivers from overload. The circuit automatically resets after a few seconds restoring operation of the drivers. Should you hear the drivers switching in and out, or if there is a reduction in volume,



In phase:

Plus (+) of amplifier goes to plus (+)(red) of speaker Minus (•) of amplifier goes to minus (black) of speaker



Out of phase:

Plus (+) of amplifier goes to minus (-)(black) of speaker Minus (-) of amplifier goes to plus (+)(red) of speaker

immediately turn down the volume level until the protection circuitry is no longer activating.

# UNDERSTANDING MIN/MAX POWER RATINGS

An amplifier with limited power output can actually cause damage to your speakers. A lower powered amplifier, when played beyond its power capability will go into clipping. This generates spurious high frequency signals which, when routed to the tweeter, can cause it to overheat and fail. The active protection circuitry in your Infinity speaker will generally safeguard against such failure; however, no protection circuit is foolproof and, therefore, overdriving the power amplifier must be avoided. It is for this reason that choosing an amplifier with more power than you need is always a wise choice.

# ACOUSTIC FEEDBACK

Acoustic feedback is created when sound waves from your speakers reach your turntable and are fed back through the phono pickup to the power amplifier. It is a never ending cycle which can cause distortion across the entire audio band. To avoid acoustic feedback problems, place your turntable on a heavy, solid support and as far away from the speakers as possible. At times, isolating the turntable with special rubber mounts may aid in reducing this form of distortion.

# IN CASE OF TROUBLE IN YOUR STEREO SYSTEM

Before consulting your dealer, INFINITY service facility or factory service department, there are tests you can do to locate and solve possible problems in your speakers. You can use your stereo's two channels of information for simple trouble-shooting. If the sound quality is distorted, listen to each speaker separately to check if the fault is present in both. If it is, then the trouble is likely to be elsewhere in your system. If the fault is in one channel only, reverse the outputs of your amplifier to the speakers. If the distortion moves to the other channel, the fault is not in the speaker.

NOTE: DO NOT SHIP ANY PARTS OR WHOLE SPEAKERS FOR SERVICE WITHOUT PRIOR APPROVAL ("RETURN AUTHORIZATION"), AND DO NOT SHIP WITHOUT ENCLOSING A COPY OF YOUR ORIGINAL BILL OF SALE.

If there is no authorized service facility near you...

Write or phone the service department (INFINITY Customer Service, 9409 Owensmouth Avenue, Chatsworth, CA 91311; (818) 407-0228) and describe the difficulty as specifically as possible. The service department will advise you of what action you should take.

# SPECIFICATIONS, INFINITESIMAL IV

Power Rating	. 10 to 80 watts per channel, RMS
Frequency Response	100Hz - 40kHz +/- 3 dB
Crossover Frequency	5000Hz
Efficiency	90 dB @ 1 watt, 1 meter
Nominal Impedance	6 ohms

INFINITY constantly strives to update and improve existing products, as well as create new ones, therefore, the specifications and construction details in this and related INFINITY publications are subject to change without notice. © 1990, Infinity Systems, Inc.

# LIMITED WARRANTY

#### Who is protected by the warranty?

Your Infinity warranty protects the original retail purchaser and all subsequent owners for a period of five (5) years (parts and labor) from any failure as a result of an original manufacturing defects so long as: (1) your Infinity loudspeakers were purchased within the fifty United States or 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.

#### What does the infinity warranty cover?

Except as specified below, this 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 the 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 of this warranty, subject to the above conditions, Infinity will pay all of the labor and material expenses to repair a warrantable defect.

#### How can warranty service be obtained?

In the event that your Infinity loudspeaker(s) should require service, you should first contact the Infinity dealer from whom the product was purchased or, if this is not practical, contact Infinity directly (ATTN: Customer Service) at 9409 Owensmouth Avenue, Chatsworth, CA 91311 (818)407-0228. We may direct you to an authorized service center for Infinity products or ask you to send them 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 speaker(s) to us without prior authorization from our Customer Service department!

You are responsible for transporting your product to either Infinity or an authorized service center and for payment of all shipping charges; however, Infinity will pay the return shipping charges (in the event you return the product to us) if the repairs are covered by warranty. If you experience difficulty in transporting your product or are in need of packing materials, please advise us and we may be able to suggest alternative procedures and/or provide adequate packaging materials.

LIMITATION OF IMPLIED WARRANTIES: All implied warranties, including fitness for a particular purpose and merchantability are limited in duration and length to 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 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 difference between this warranty and the provisions in any advertisements, product brochures or packaging cartons, the terms of this warranty will prevail.