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Printed 5/06 Part No. CASCADELIT5/06

Designed, edited and digitally produced by Harman Consumer Group Marketing & Design Center, Woodbury, NY.

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Infinity continually strives to update and improve existing products, as well as create new ones. The specifications and construction details herein are therefore subject to change without notice.



Changing the Shape of Sound... Again.

CASCADE
SERIES



TECHNOLOGY • PERFORMANCE • DESIGN

68

1968
Servo-Statik 1A



76

72



78

IRS V

79

82



IRS Beta

85

00

98



Prelude MTS

01

03

05

2005
Cascade



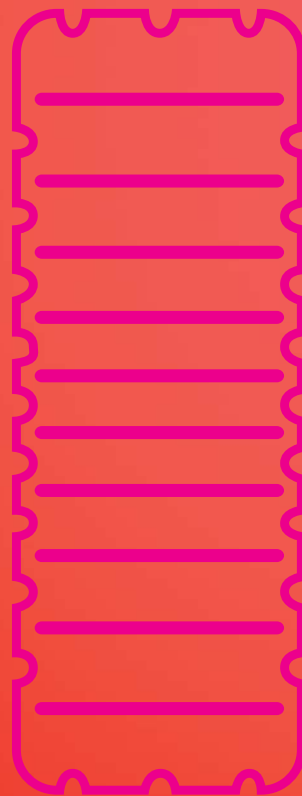
INFINITY CASCADE™

**LEGENDARY INFINITY PERFORMANCE.
ENTIRELY NEW FORM FACTOR.**

The popularity of flat-panel plasma and LCD video displays ought to suggest at least one certainty about the future of home audio – tomorrow's loudspeakers won't be the boxy, intrusive instruments they often are today. They'll deliver all the power and realism we've come to expect. But they'll be thinner and more elegant than ever before. And the first of this brave new generation? Infinity Cascade.™

Infinity has been advancing the science of sound for almost 40 years with breakthrough audio technologies and landmark loudspeaker systems. Cascade continues the tradition. With patent-pending Maximum Radiating Surface™ (MRS™) flat-panel transducers, Cascade delivers uncompromised Infinity sonic performance from strikingly beautiful speakers.

High-definition flat-panel video, meet high-performance flat-panel audio.



**WITH INNOVATIVE FLAT-PANEL
TRANSDUCERS, CASCADE IS MINIMALIST
IN LOOK ONLY.**

Imagine you're an audio engineer in search of a something new — a dramatically less-intrusive loudspeaker design. The problem is that conventional transducer cones, when coupled with their motor assemblies, are nearly as deep as they are wide. And placing a circular cone in a rectangular enclosure results in rather a lot of wasted space in all directions.

Now imagine you're an audio engineer at Infinity, a company with 30 years of experience in electromagnetic induction (EMI) transducers to guide your work. If you could combine the flat, rectangular diaphragm of an EMI device with the motor technology of a conventional loudspeaker cone, you just might have something.

**MAXIMUM RADIATING SURFACE™
TRANSDUCERS.**

MRS™ flat-panel transducers in Infinity's Cascade Series permit unobtrusive speaker enclosures that are nearly as thin as they are narrow. And because the MRS diaphragm functions much like a flat piston, Cascade speakers achieve flat broadband frequency response and uniform on- and off-axis dispersion with minimal breakup, even at high listening levels. That's performance that not even the boxiest of conventional loudspeakers can surpass.



High-Gloss Silver

IT'S NOT EASY BEING FLAT.

The appeal of flat-panel transducers has never been more obvious, and the basic technology behind them is straightforward enough. But earlier flat panels had performance limitations in the low frequencies, and were prone to thermal compression. They were also expensive, with several transducers needed for use in high-performance systems. In developing Cascade's MRS transducers, Infinity's engineers incorporated new materials and technologies that have overcome the drawbacks and deliver significant performance benefits.



CMMD cones consist of a stiff aluminum core, deep-anodized on both sides (alumina) for increased strength and rigidity.

CMMD® DIAPHRAGM.



Optimizing the parameters of Cascade's flat-panel diaphragms presented a serious engineering challenge. But by reinforcing

Infinity's patented Ceramic Metal Matrix Diaphragm (CMMD®) – a uniquely rigid lightweight material – with strategic ribs and gussets, Infinity engineers were able to strike the perfect balance between electro-acoustic efficiency and reliability.



DUAL ELLIPTICAL VOICE COILS.

Another flat-panel challenge was finding a way to uniformly drive as much of the diaphragm's radiating surface as possible. A traditional cone is only driven by a small voice coil at its apex, but flat panels require a completely different approach. Infinity engineers developed dual elliptical voice coils for Cascade's MRS drivers. With more than six times the voice-coil contact of a typical cone transducer, they move the diaphragm much like

an ideal piston, for crystal-clear, resonance-free operation throughout the driver's entire dynamic range.



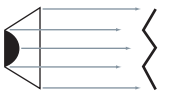
GREATER DYNAMIC RANGE.

In addition to driving the flat diaphragm more uniformly, the dual elliptical voice coils offer another benefit. The greatly increased surface area of the coils allows them to dissipate heat more efficiently, reducing thermal compression and dramatically increasing the speaker's dynamic range. The result is increased sonic clarity with reduced distortion.

INFINITY MRS
FLAT-PANEL TRANSDUCER



CONVENTIONAL CONE



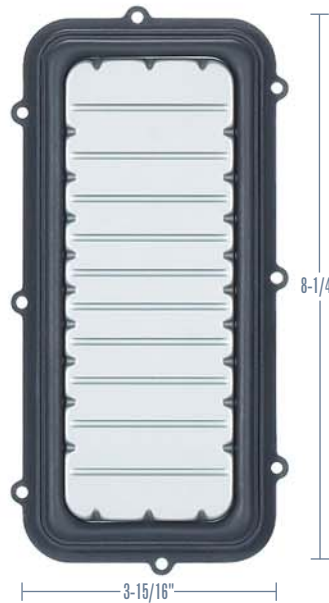
A transducer diaphragm where all points move together and in phase results in less time domain smear, when compared to conventional cone transducers.

MORE UNIFORM RADIATION.

The flat pistononic response of Cascade's MRS drivers sends a cleaner, more uniform sound to listeners' ears than conventional cones. The geometry of a cone inherently creates signals of unequal length with different arrival times, causing what engineers call "time domain smear." Cascade's signals arrive together, for exceptional detail and resolution.



1-1/4"





High-Gloss Black



BEYOND THE BOX.

The first Infinity speaker system was also the first in the industry to include a powered subwoofer. This innovation led directly to the heightened realism of the home theater systems enjoyed by movie lovers all over the world. Now, Infinity's Cascade Model Fifteen and Model Twelve make the ubiquitous black-cube subwoofer a thing of the past.

Deep, realistic bass is an essential element of the cinematic experience. But it's just as essential in duplicating the experience of a live musical performance. With the high-performance, small-footprint Model Twelve and the even more powerful and uniquely thin Model Fifteen, Infinity delivers authoritative, distortion-free bass in subwoofers that are easily integrated into any music or home theater system.

Deeper, cleaner bass from room-friendly and more aesthetically pleasing designs. It's a combination that discerning listeners (and their decorators) have long been hoping for.



Both the Model Fifteen and the Model Twelve are also designed for easy integration into your listening room, as well as your décor. Infinity's proprietary Room Adaptive Bass Optimization System™ (R.A.B.O.S.™) allows you to precisely tune the response of your subwoofer to the physical characteristics of your room with just three simple adjustments. And a full complement of inputs and controls makes connection with any movie or music system simplicity itself.

Real-Wood Cherry Veneer



CASCADE
SERIES

Infinity®

**FILL YOUR SPACE WITH SOUND,
NOT SPEAKERS.**

Design has always been an Infinity hallmark, and Cascade's revolutionary technologies have given our designers even greater freedom. The bulky footprint of the conventional loudspeaker is gone. (With wall-mounted models, the footprint disappears entirely.) Even the powered subwoofer – that most essential of Infinity innovations – has an unexpected new look. Narrow, elegant and (above all) thin, Cascade will surround you with brilliant, captivating sound, without intruding on your space.

Has there ever been a more beautiful way to experience the full excitement of your favorite movies and music?



MODEL NINE
FLOORSTANDING



MODEL SEVEN
FLOORSTANDING



MODEL FIVE
BOOKSHELF/ON-WALL



MODEL THREE V
BOOKSHELF/ON-WALL



MODEL THREE C
CENTER CHANNEL/ON-WALL

Recommended Amplifier Power Range	10 – 150 Watts	10 – 100 Watts	10 – 100 Watts	10 – 150 Watts	10 – 150 Watts
Frequency Response	80Hz – 20kHz (±3dB) 40kHz (–6dB)	100Hz – 20kHz (±3dB) 40kHz (–6dB)	100Hz – 20kHz (±3dB) 40kHz (–6dB)	80Hz – 20kHz (±3dB) 40kHz (–6dB)	80Hz – 20kHz (±3dB) 40kHz (–6dB)
Sensitivity (2.83V @ 1m)	87dB	85dB	85dB	87dB	87dB
Nominal Impedance	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Crossover Frequency	1,500Hz; 24dB/Octave	1,800Hz; 24dB/Octave	1,800Hz; 24dB/Octave	1,500Hz; 24dB/Octave	1,500Hz; 24dB/Octave
Mid-Bass Driver(s)	Dual 7-3/4" x 3-3/8" (197mm x 85mm) CMMD, [®] magnetically shielded	7-3/4" x 3-3/8" (197mm x 85mm) CMMD, [®] magnetically shielded	7-3/4" x 3-3/8" (197mm x 85mm) CMMD, [®] magnetically shielded	Dual 7-3/4" x 3-3/8" (197mm x 85mm) CMMD, [®] magnetically shielded	Dual 7-3/4" x 3-3/8" (197mm x 85mm) CMMD, [®] magnetically shielded
High-Frequency Driver	1" (25mm) CMMD, [®] magnetically shielded	1" (25mm) CMMD, [®] magnetically shielded	1" (25mm) CMMD, [®] magnetically shielded	1" (25mm) CMMD, [®] magnetically shielded	1" (25mm) CMMD, [®] magnetically shielded
Dimensions (H x W x D)	47" x 10-1/2" x 11-1/2" (1194mm x 267mm x 292mm)	47" x 10-1/2" x 11-1/2" (1194mm x 267mm x 292mm)	Wall-mounted 22-1/2" x 5-1/2" x 5-1/2" (572mm x 140mm x 140mm) On included base 30-1/4" x 7-3/4" x 8-1/2" (768mm x 197mm x 216mm)	Wall-mounted 30" x 5-1/2" x 5-1/2" (762mm x 140mm x 140mm) On included base 36-5/8" x 7-3/4" x 8-1/2" (930mm x 197mm x 216mm)	5-1/2" x 30-3/4" x 6" (140mm x 781mm x 152mm) Wall-mount included
Weight	28.2 lb/12.8kg	24.7 lb/11.2kg	Wall-mounted – 13.5 lb/6.1kg On included base – 20.5 lb/9.3kg	Wall-mounted – 18 lb/8.2kg On included base – 26 lb/11.8kg	18 lb/8.2kg



MODEL FIFTEEN
POWERED SUBWOOFER



MODEL TWELVE
POWERED SUBWOOFER



REAL-WOOD CHERRY VENEER

Amplifier Output	800 Watts RMS	300 Watts RMS
Frequency Response	32Hz – 150Hz (–3dB) 29Hz (–6dB)	32Hz – 150Hz (–3dB) 28Hz (–6dB)
Low-Frequency Driver(s)	Four 6" x 6" (150mm x 150mm)	10" (250mm) CMMD, [®] Dual 10" passive radiators
Crossover Frequency	Adjustable 50Hz – 150Hz or LFE	Adjustable 50Hz – 150Hz or LFE
R.A.B.O.S.[™] (Accessory kit included)	Yes	Yes
Dimensions (H x W x D)	13" x 37" x 8-1/2" (330mm x 940mm x 216mm)	20" x 15" x 13-7/8" (508mm x 381mm x 352mm)
Weight	98 lb/44.5kg	42 lb/19kg



HIGH-GLOSS BLACK



HIGH-GLOSS SILVER