

Infinity







Taking It to the Street

At Infinity, all our efforts are driven by the love of music in its many forms and informed by our unrivalled technological insight and uncompromising approach to sound quality as we apply our sophisticated, exclusive technologies to a broad range of products from the most esoteric to the more affordable.

Infinity has consistently created state of the art home loudspeaker systems since 1968, when three audio enthusiasts working in a suburban

Los Angeles garage decided to use their expertise in aerospace engineering, materials technologies and high tech physics to build the world's finest loudspeakers. Bringing together craftsmanship, art and science, all in the service of music, Infinity is famous among music lovers and audio experts the world over.

Today, Infinity applies the same cutting edge engineering skills that make us world leaders in home audio to create original and effective solutions to the unique problems of in-car entertainment systems, combining groundbreaking technology, practical and reliable installation and effortless musicality.

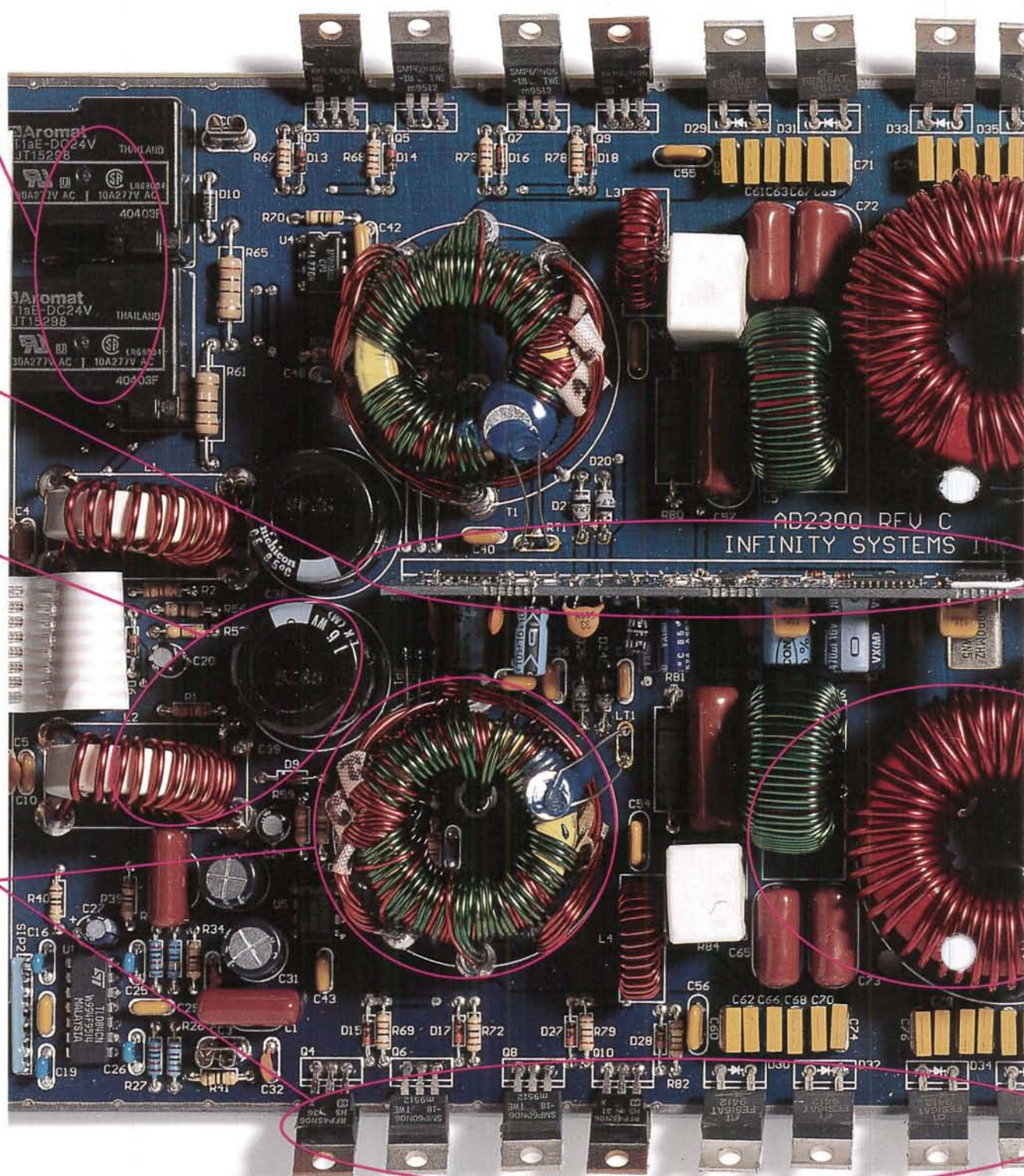
In short, Infinity is - Taking It to the Street.

Balanced noise
cancelling audio inputs
accept signals up to 9
VRMS

PWM controller and
4MHz crystal controlled
Master Clock

Left channel power
input filtering
removes alternator
noise for clean
power

Left channel High
efficiency power supply
with paralleled 60A
MOSFET transistors and
high current diodes

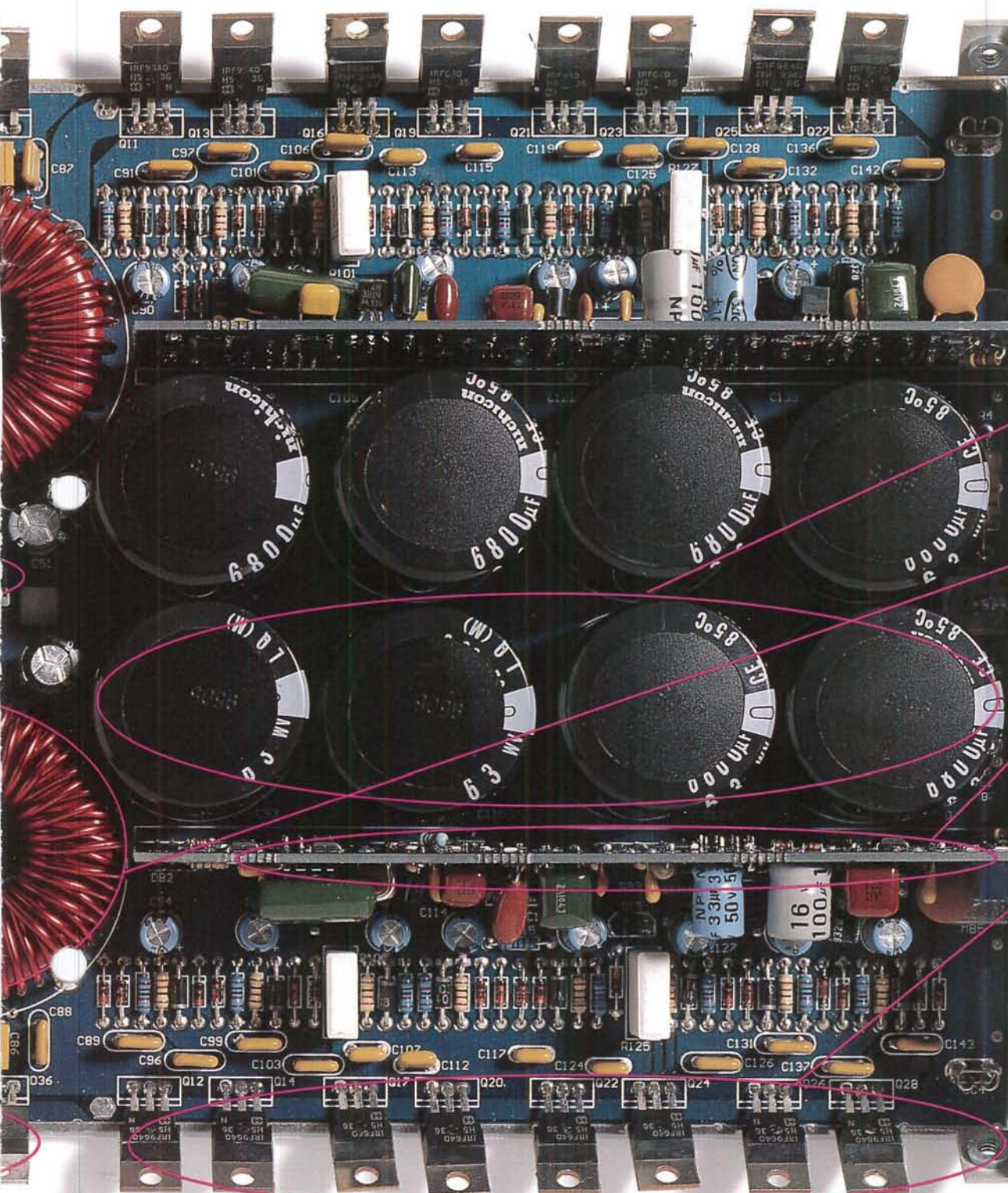


Beta Digital Amplifiers

Based on the Class D circuit topology pioneered by Infinity, the Beta Series Digital power amplifiers quite simply represent the most advanced automotive sound engineering on the face of this planet. Significantly more efficient than conventional Class AB power amplifiers, the Beta Series Class D switching amplifiers run substantially cooler and consume far less current, ensuring greater long-term reliability and placing less demand on the car's limited electrical system. As a direct result of the exceptional efficiency, low power consumption and minimal heat of the

innovative Class D circuit, the Beta Series Digital Amps have compact dimensions ideally suited to the restricted space of auto interiors. For uncompromising competition-grade performance, the Beta Series also includes the world's only dedicated digital subwoofer amplifier, Beta 300, capable of delivering an astounding 1,000 Watts in 4-Ohm bridged mode.

Typically, more than half of the energy from a conventional amplifier's power supply is wasted before it reaches the speakers. Low efficiency is a special problem in a battery-powered automotive system, where there is



Left channel internal capacitor bank equal to a 0.3 Farad 12V capacitor

Proprietary pulse width modulator module converts analog signal to digital

Left channel 24 db/oct high power filtering removes switching noise and makes the output signal analog

Digital switching Output stage with 8 MOSFETS per channel for maximum current throughput

Beta 300 Dual Mono Digital Amplifier

limited energy to begin with. Infinity's proprietary Class D circuit introduces pulse-width modulated power for an increase in efficiency which is readily apparent (Figure A). Because the high over-all efficiency of the Beta Series Digital amps requires far less electrical power and generates far less heat than conventional analog designs, the Beta amplifiers have much more compact, installation-friendly dimensions than Class AB amps of comparable power.

And, more importantly, the transparent, dynamic sonic quality of the Beta amplifiers is superior to any existing amplifier design.

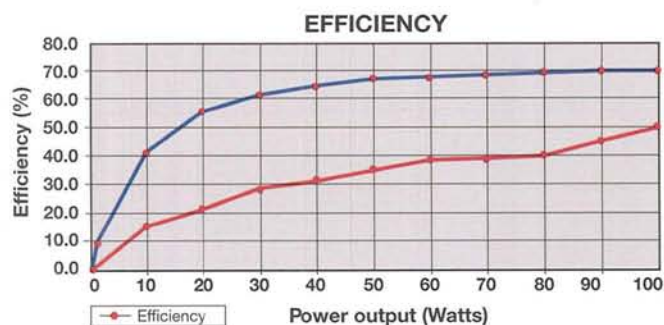
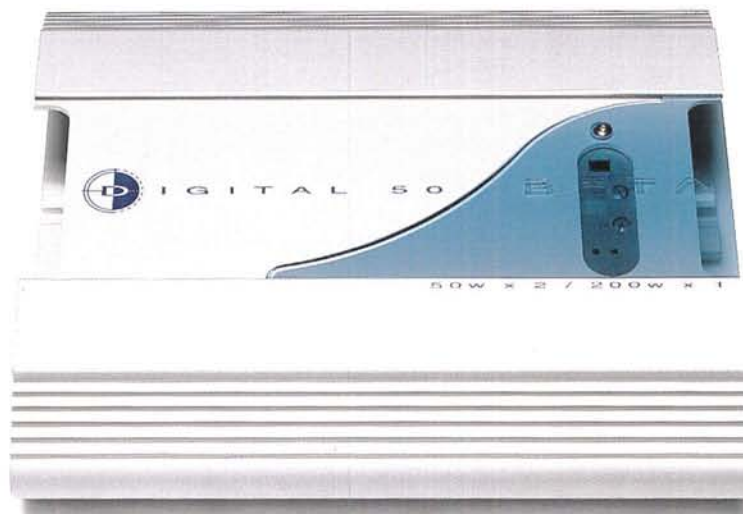


Figure A. Efficiency versus power output for an Infinity Beta Digital amplifier (blue curve) compared to a conventional analog amplifier driven by a DC-to-DC converter (red curve).



Digital 100 Power Output, 4 ohm: 2 x 100W. Power Output, 2 ohm: 2 x 200W. Power Output, Bridged 4 ohm: 400W.
Max. Current Draw: 40A. Size: (HxWxD) 5.7 x 21.6 x 28.6 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 Hz - 20 kHz



Digital 50 Power Output, 4 ohm: 2 x 50W. Power Output, 2 ohm: 2 x 100W. Power Output, Bridged 4 ohm: 200W.
Max. Current Draw: 25A. Size: (HxWxD) 5.7 x 21.6 x 23.8 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 Hz - 20 kHz



Digital 300 Subwoofer/MidBass amplification only
Power Output, 4 ohm: 2 x 300W. Power Output, 2 ohm: 2 x 500W.
Max. Current Draw: 60A. Size: (HxWxD) 5.7 x 21.6 x 41.0 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 500 Hz \pm 1dB

The Beta Series defines the no-compromise Infinity approach to automotive component loudspeaker systems: to achieve the finest performance in high end custom installations. Just as the Infinity Reference Systems set a new standard for home audio, the Beta Series advances the state of the art in mobile audio technology. The Infinity Beta Series is not for everyone, and certainly not for anyone for whom "good enough" is good enough. Infinity offers the Beta Series to the select few who can fully appreciate the ultimate in car stereo performance, whether for serious Sound-Off com-

petition or just for the pure love of music. Because Beta Series drivers are designed to withstand the harsh

conditions of the automotive environment, premium rubber surrounds are employed instead of less durable foam or paper. The innovative Infinity Beta One parachute silk tweeter dome incorporates a resonance-damping woven pattern for enhanced musical definition. The large dome provides excellent output as low as 1,500 Hz, making it possible to install the Beta One at a greater distance from the midrange driver for increased system flexibility. Injection Molded Graphite driver cones reinforced with graphite carbon fibers for ideal stiffness and damping are mounted on cast alloy baskets for strength and precision. The long-excursion Beta woofers provide maximum bass impact from compact vented or sealed boxes.

BETA





Beta Fifteen

*Size: 37.5 cm (15") Subwoofer
Power handling: 350 Watts
Frequency Response: 18-350Hz
Sensitivity: 97dB @ 2.83 Volts
Mounting Depth: 17 cm (6.75")
Available with Dual Voice Coil*



Beta Ten

*Size: 25 cm (10") Subwoofer
Power handling: 250 Watts
Frequency Response: 20-500Hz
Sensitivity: 93dB @ 2.83 Volts
Mounting Depth: 12 cm (4.75")
Available with Dual Voice Coil*



Beta Twelve

*Size: 30 cm (12") Subwoofer
Power handling: 275 Watts
Frequency Response: 20-400Hz
Mounting Depth: 15 cm (5.875")
Available with Dual Voice Coil*

Beta Six

Size: 16.5 cm (6.5") Midbass
Power handling: 140 Watts
Frequency Response: 36-5,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 7.6 cm (3")
Note: Grill optional



Beta Eight

Size: 20 cm (8") Subwoofer
Power handling: 200 Watts
Frequency Response: 20-600Hz
Sensitivity: 90dB @ 2.83 Volts
Mounting Depth: 9.3 cm (3.65")
Available with Dual Voice Coil



Beta Five

Size: 5-1/4" (13 cm) Midrange
Power handling: 120 Watts
Frequency Response: 40-5,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 7 cm (2.75")
Note: Grill optional



Beta Four

Size: 10 cm (4") Midrange
Power handling: 100 Watts
Frequency Response: 60-8,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 4.8 cm (1.875")
Note: Grill optional



Beta One

Size: 3.3 cm (1.3") Tweeter
Power handling: 75 Watts
Frequency Response: 1,700-24,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth (Flush): 2.7 cm (1.06")



It is a popular misconception that innovative technology also means increased complexity. At Infinity we feel that the opposite should be the case: True technological breakthroughs should not complicate your life, they should simplify it. Which brings us to the Infinity Kappa Series power amplifiers. While most manufacturers routinely expect you to invest in costly and complex add-on signal processors, every Kappa Series amplifier comes as a complete comprehensive package, incorporating continuously variable integrated electronic crossovers which may be selected as high-pass, low-pass or full-range with filtered auxiliary outputs for unparalleled system design flexibility and a unique system upgrade path. Based on a flexible, fully balanced low-noise differential

Kappa

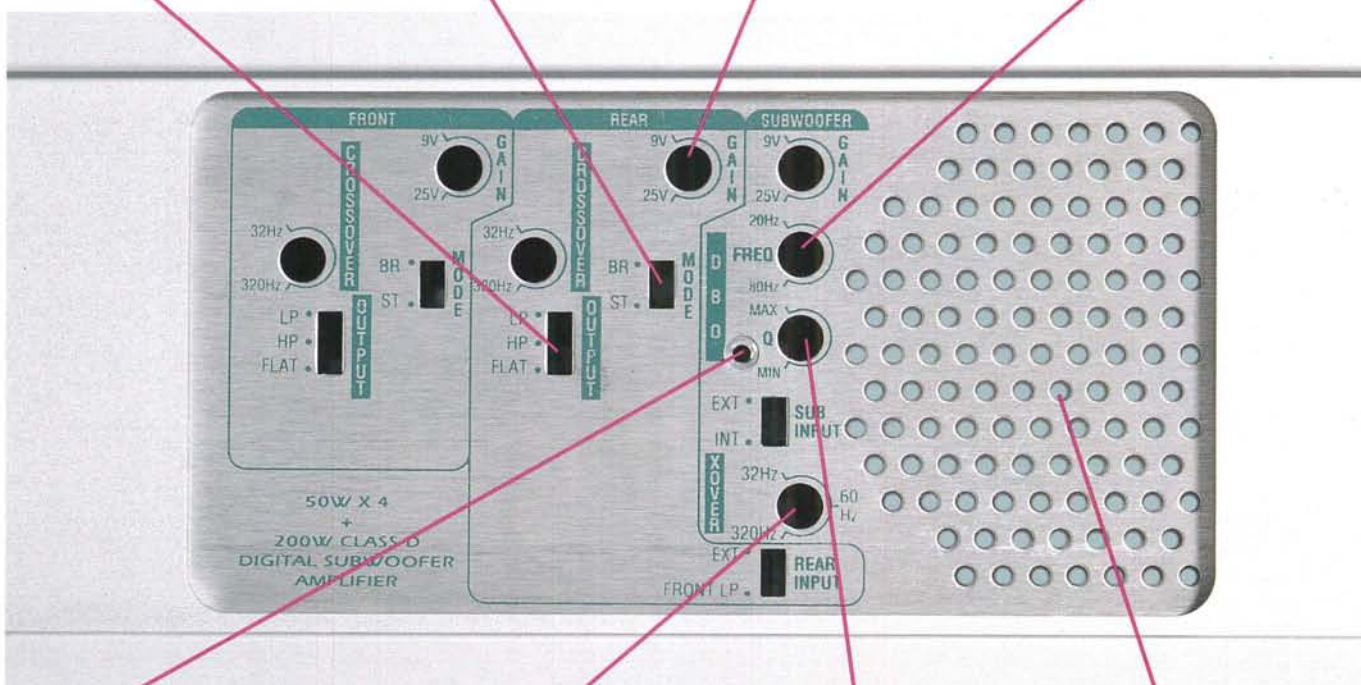
input section, the Kappa Series amplifiers are compatible with high performance competition-grade signal sources. Each Kappa amplifier is built on a UniBlock chassis with heatsinking on all sides of the circuit for effective heat dissipation and cool-running long-term performance. The UniBlock chassis also acts as an efficient barrier to RF interference for improved signal-to-noise ratio and cleaner radio reception. Infinity's exclusive Dynamic Bass Optimizer (DBO) is light-years ahead of conventional "Bass EQ" circuits, providing incomparable flexibility to optimize any woofer/cabinet combination and to increase sonic impact from midrange and midbass drivers. The flagship Infinity 255a also includes a 200 Watt Class D digital dedicated subwoofer channel.

Crossover switching for Low Pass (LP), High Pass (HP) or Bypass (FLAT)

Switch for Bridged or Stereo Mode

9 V RMS Full differential input adjustable from 250 mV to 9 V RMS

User-selectable attack point for DBO (See DBO)



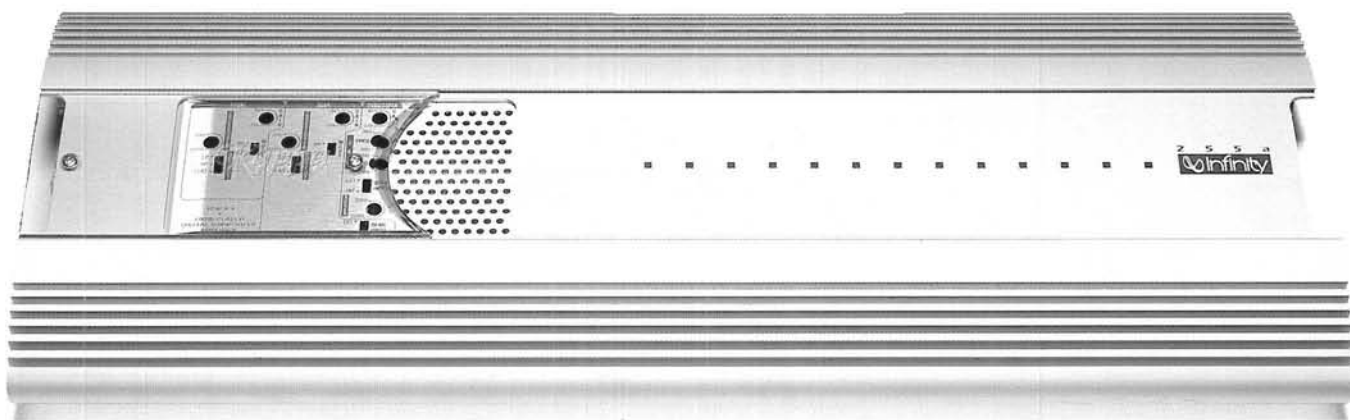
Dynamic Bass Optimizer for incomparable tailoring of low frequency response from any speaker/enclosure

Extremely flexible continuously variable crossover from 32 Hz to 320 Hz

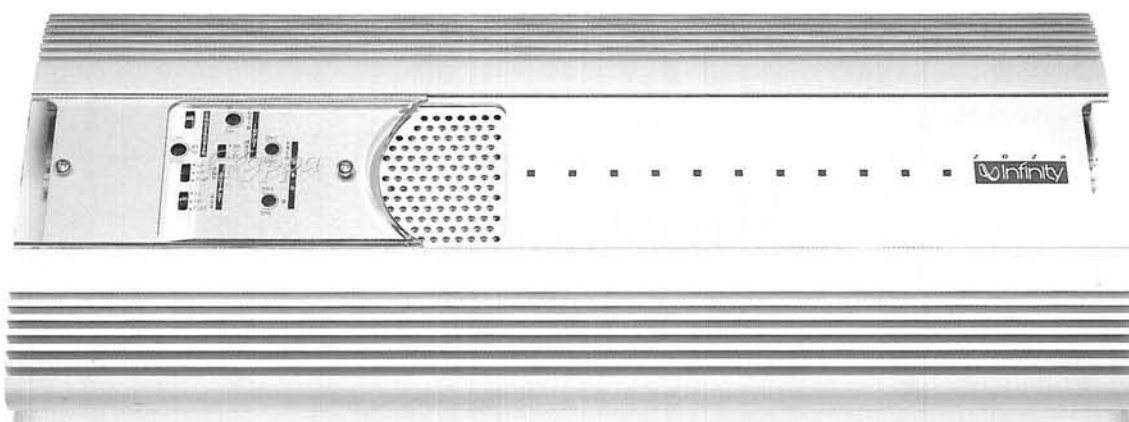
Q circuit optimizes low frequency output for the specific woofer application.

Power/Protection display for constant confirmation of amplifier status

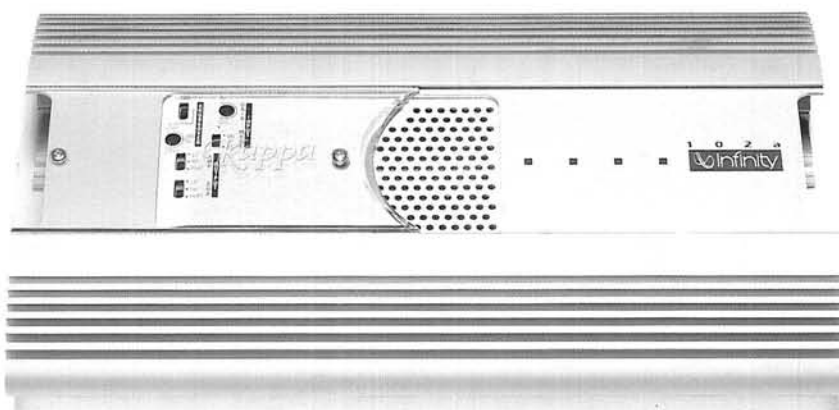
Power Amplifiers



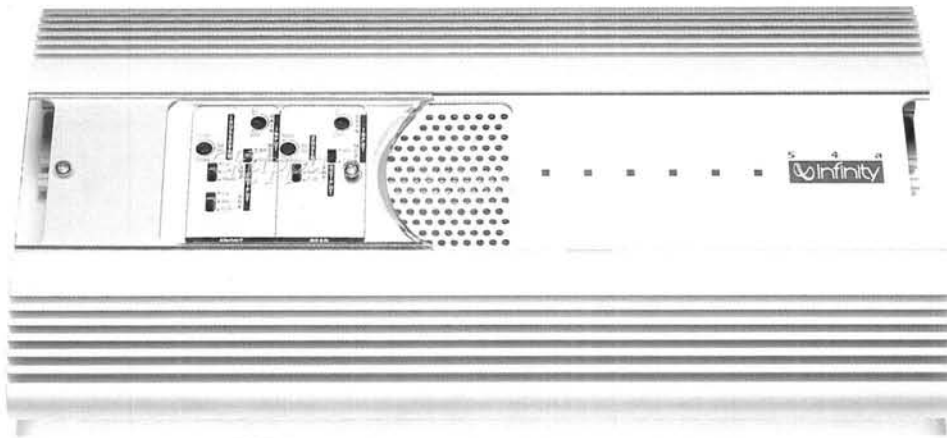
KA255a Power Output, 4 ohm: 4 x 50W - 1 x 200W. Power Output, 2 ohm: 4 x 75W - 1 x 200W. Power Output, Bridged 4 ohm: 2 x 150W - 1 x 200W.
Max. Current Draw: 80A. Size: (HxWxD) 5.7 x 21.6 x 58.4 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 30 kHz \pm 1dB



KA202a Power Output, 4 ohm: 2 x 200W. Power Output, 2 ohm: 2 x 300W. Power Output, Bridged 4 ohm: 600W.
Max. Current Draw: 80A. Size: (HxWxD) 5.7 x 21.6 x 49.5 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 30 kHz \pm 1dB

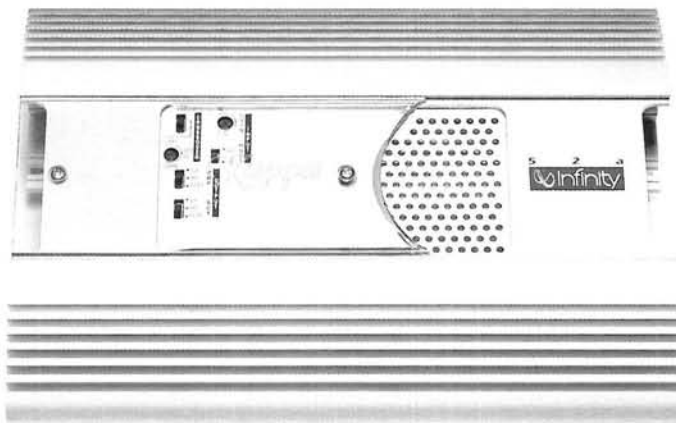


KA102a Power Output, 4 ohm: 2 x 100W. Power Output, 2 ohm: 2 x 150W.
Power Output, Bridged 4 ohm: 300W.
Max. Current Draw: 40A. Size: (HxWxD) 5.7 x 21.6 x 36.9 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 30 kHz \pm 1dB



KA54a Power Output, 4 ohm: 4 x 50W. Power Output, 2 ohm: 4 x 75W.
Power Output, Bridged 4 ohm: 2 x 150W.

Max. Current Draw: 40A. Size: (HxWxD) 5.7 x 21.6 x 40.6 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 30 kHz ± 1 dB



KA52a Power Output, 4 ohm: 2 x 50W. Power Output, 2 ohm: 2 x 75W.
Power Output, Bridged 4 ohm: 150W. Max. Current Draw: 20A.

Size: (HxWxD) 5.7 x 21.6 x 29.2 cm. Input sensitivity: 250 mV - 9V RMS. Frequency Response: 20 - 30 kHz ± 1 dB

Figure A

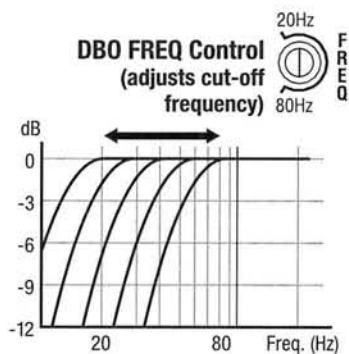
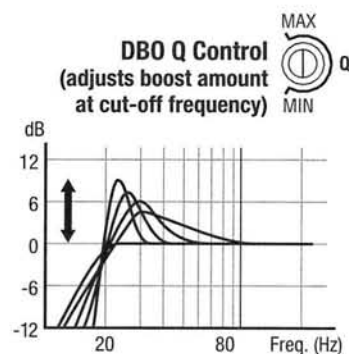


Figure B



Dynamic Bass Optimizer (DBO): Infinity's proprietary circuit provides variable filtering with adjustable boost and "Q" below 100Hz far beyond conventional "Bass EQ" circuits by allowing the low frequency output to be optimized for specific woofer applications. Frequencies below an enclosure's tuned frequency can be attenuated (see figure B), preventing damage to the driver and allowing the amplifier's power to be better utilized within the desired range. Further, low frequency output may be adjusted to extract the maximum bass performance available within woofer/vehicle limitations and transfer functions.

Automotive Loudspeakers

The Infinity Kappa Series of automotive loudspeakers is designed to let you take the show on the road with a convincing, lifelike musical performance, subtle nuances and textures, powerful dynamic range and a rock-solid three-dimensional image that puts you front row center. To ensure that the outstanding performance of the Kappa Series will fit your car, the Kappa speaker

Kappa

systems are designed for easy installation without costly and time-consuming modifications. The miniature tweeters can be flush-mounted or surface-mounted and the integrated two-way and three-way systems are available in standard sizes for convenient drop-in replacement. For non-standard installations, the Infinity Kappa range also includes matched separate components.





Kappa 693i

Size: 15 x 23 cm (6"x9") 3-Way Speaker
Power handling: 110 Watts
Frequency Response: 38-21,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 8 cm (3.125")



Kappa 692i

Size: 15 x 23 cm (6"x9") 2-Way Speaker
Power handling: 100 Watts
Frequency Response: 38-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 8 cm (3.125")



Kappa 63i

Size: 16 cm (6-1/2") 3-Way Speaker
Power handling: 75 Watts
Frequency Response: 50-21,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.1 cm (2.375")

Kappa 52i

*Size: 13 cm (5-1/4") 2-Way Speaker
Power handling: 50 Watts
Frequency Response: 59-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 5.4 cm (2.125")*



Kappa 62i

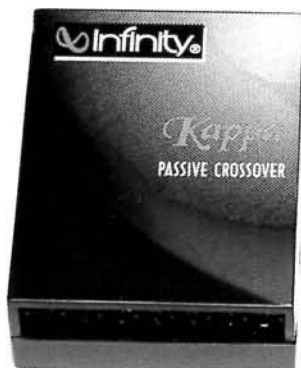
*Size: 16 cm (6-1/2") 2-Way Speaker
Power handling: 70 Watts
Frequency Response: 50-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.1 cm (2.375")*



Kappa 42i

*Size: 10 cm (4") 2-Way Speaker
Power handling: 45 Watts
Frequency Response: 80-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 4.8 cm (1.875")*





Kappa 65cs

Size: 16.5 cm (6-1/2")

2-Way Component Speaker System

Power handling: 125 Watts

Frequency Response: 50-20,000Hz

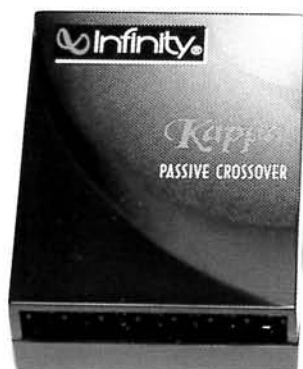
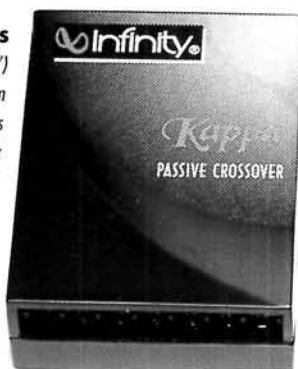
Sensitivity: 89dB @ 2.83 Volts

Mounting Depth: 6.3 cm (2.48") Woofer

2.2 cm (0.9") Tweeter

Note: Grill not included

Kappa 60cs
Size: 16 cm (6-1/2")
2-Way Component Speaker System
Power handling: 120 Watts
Frequency Response: 50-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.4 cm (2.5") Woofer
2.2 cm (0.9")
Tweeter



Kappa 50cs

Size: 13 cm (5-1/4")

2-Way Component Speaker System

Power handling: 60 Watts

Frequency Response: 59-20,000Hz

Sensitivity: 89dB @ 2.83 Volts

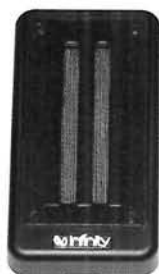
Mounting Depth: 6.4 cm (2.5") Woofer

2.2 cm (0.9") Tweeter



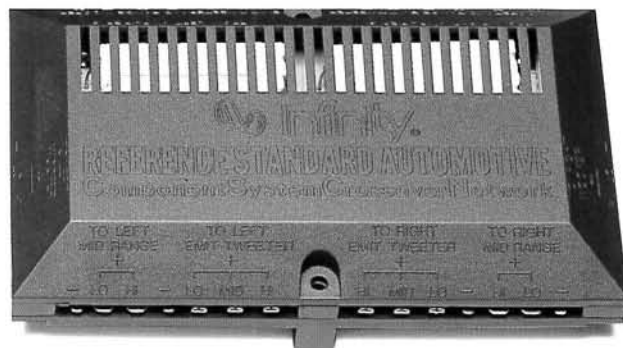
Kappa 40cs

Size: 10 cm (4")
2-Way Component Speaker System
Power handling: 60 Watts
Frequency Response: 80-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 5.1 cm (2") Woofer
2.2 cm (0.9") Tweeter



Kappa 1cs

Size: 15 x 23 cm (6"x9")
3-Way Component Speaker System
Power handling: 200 Watts
Frequency Response: 36-45,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.4 cm (2.5") Woofer / 4.1 cm (1.63") Midrange / 1.1 cm (0.42") EMIT tweeter





Kappa 652cf

Size: 16.5 cm (6-1/2")
 2-Way Integrated Custom Fit System
 Power handling: 70 Watts
 Frequency Response: 50-20,000Hz
 Sensitivity: 89dB @ 2.83 Volts
 Mounting Depth: 6.3 cm (2.5")



Kappa 572cf

Size: 14 cm (4-1/2")
 2-Way Integrated Custom Fit Speaker
 Power handling: 75 Watts
 Frequency Response: 00-20,000Hz
 Sensitivity: 89dB @ 2.83 Volts
 Mounting Depth: 6.5 cm (1.75")



Kappa 462cf

Size: 10 x 16 cm (4"x6")
 2-Way Custom Fit Plate Speaker
 Power handling: 55 Watts
 Frequency Response: 78-20,000Hz
 Sensitivity: 89dB @ 2.83 Volts
 Mounting Depth: 4.5 cm (1.75")



Kappa 32cf

Size: 9 cm (3-1/2")
 2-Way Integrated Custom Fit Speaker
 Power handling: 30 Watts
 Frequency Response: 95-20,000Hz
 Sensitivity: 89dB @ 2.83 Volts
 Mounting Depth: 3.8 cm (1.5")



Kappa 60m

Size: 16 cm (6-1/2") Midrange
Power handling: 100 Watts
Frequency Response: 50-6,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.4 cm (2.5")



Kappa 50m

Size: 13 cm (5-1/4") Midrange
Power handling: 80 Watts
Frequency Response: 59-6,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.4 cm (2.5")



Kappa 40m

Size: 10 cm (4") Midrange
Power handling: 70 Watts
Frequency Response: 80-6,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 5.1 cm (2")



Kappa EMIT

Electro Magnetic Induction Tweeter
EMIT -N Tweeter (Crossover included)
Power handling: 50 Watts
Frequency Response: 6,000-45,000Hz
Sensitivity: 94dB @ 2.83 Volts
Mounting Depth (Flush): 1.1 cm (0.45")



Kappa 10t

Size: 1.9 cm (3/4") Tweeter
Silk Dome Tweeter (Crossover included)
Power handling: 50 Watts
Frequency Response: 2,500-22,000Hz
Sensitivity: 90dB @ 2.83 Volts
Mounting Depth (Flush): 2.2 cm (0.9")



Kappa 120w.ib/br

Size: 30 cm (12") Subwoofer
Infinite Baffle Application /
Bass Reflex Application
Power handling: 300 / 250 Watts
Frequency Response: 25-1,000 / 20-1,000Hz
Sensitivity: 94dB @ 2.83 Volts
Mounting Depth: 13.4 cm (5.25")
Available with Dual Voice Coil



Kappa 100w.ib/br

Size: 25 cm (10") Subwoofer
Infinite Baffle Application /
Bass Reflex Application
Power handling: 200 / 250 Watts
Frequency Response: 34-1,000 / 25-1,000Hz
Sensitivity: 93dB @ 2.83 Volts
Mounting Depth: 11.1 cm (4.375")
Available with Dual Voice Coil



Kappa 80w.ib/br

Size: 20 cm (8") Subwoofer
Infinite Baffle Application /
Bass Reflex Application
Power handling: 175 / 175 Watts
Frequency Response: 40-1,500 / 40-1,500Hz
Sensitivity: 93dB @ 2.83 Volts
Mounting Depth: 9.5 cm (3.75")
Available with Dual Voice Coil



Kappa 100bt Subwoofer Size: 25 cm (10").
Power handling: 200 Watts. Frequency Response: 28-1,000Hz
Sensitivity: 93dB @ 2.83 Volts. Dimensions (Width x Length): 31 x 60 cm



Kappa 120bt Subwoofer Size: 30 cm (12").
Power handling: 250 Watts. Frequency Response: 25-1,000Hz.
Sensitivity: 94dB @ 2.83 Volts. Dimensions (Width x Length): 35 x 72 cm

The perfectly matched Kappa Series component systems in a range of popular sizes take the guesswork out of high end auto installations. The two-way and three-way systems offer component-quality performance suitable for standard speaker cut-out spaces. All Kappa components and full-range systems incorporate premium rubber surrounds for long-term reliability regardless of temperature and moisture conditions. Kappa drivers feature space-age Injection Molded Quartz cones, based on a unique blend of polypropylene and graphite for stiffness and quartz silicate for effective resonance damping. The high-tech Kappa tweeter domes employ low-mass parachute silk for high efficiency and high internal damping with a special geometric weave for open, airy high frequencies.

When not designing award-winning cost-no-object "Statement" products, Infinity's designers take equal pride in being able to deliver premium performance at real-world prices. In fact, our extensive experience out there on the cutting edge frequently trickles down, allowing us to offer

remarkable sound quality in the Reference Series at moderate prices that other manufacturers, without access to

REFERENCE

sophisticated research and development facilities, just can't match. The Reference Series features many sizes, shapes and configurations in order to satisfy even the most specialized installation requirements. Infinity Reference Series speakers fit like they were factory-installed, but they sound a whole lot better. All models, except Custom Fit and Reference 650cs, includes grilles.



Reference 6903i

Size: 15 x 23 cm (6"x9")

3-Way Speaker

Power handling: 90 Watts

Frequency Response: 50-21,000Hz

Sensitivity: 91dB @ 2.83 Volts

Mounting Depth: 8.0 cm (3.125")



Reference 6902i

Size: 15 x 23 cm (6"x9")

2-Way Speaker

Power handling: 90 Watts

Frequency Response: 55-20,000Hz

Sensitivity: 91dB @ 2.83 Volts

Mounting Depth: 8.0 cm (3.125")



Reference 602i

Size: 16 cm (6-1/2")

2-Way Speaker

Power handling: 60 Watts

Frequency Response: 60-20,000Hz

Sensitivity: 90dB @ 2.83 Volts

Mounting Depth: 5.7 cm (2.25")





Reference 502i

Size: 13 cm (5-1/4")
2-Way Speaker
Power handling: 45 Watts
Frequency Response: 80-20,000Hz
Sensitivity: 90dB @ 2.83 Volts
Mounting Depth: 5.4 cm (2.125")



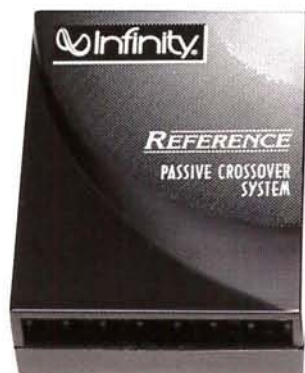
Reference 402i

Size: 10 cm (4")
2-Way Speaker
Power handling: 35 Watts
Frequency Response: 100-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 4.8 cm (1.875")



Reference 401i

Size: 10 cm (4")
Dual Cone Speaker
Power handling: 35 Watts
Frequency Response: 100-18,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 4.8 cm (1.875")



**Component System
Reference 650cs**

Size: 16.5 cm (6-1/2")
2-Way Component Speaker System
Power handling: 95 Watts
Frequency Response: 60-20,000Hz
Sensitivity: 90dB @ 2.83 Volts
Mounting Depth: 6.3 cm (2.5") Woofer
2.2 cm (0.9") Tweeter
Note: Grille not included



Reference 600cs

Size: 16 cm (6-1/2")

2-Way Component Speaker System

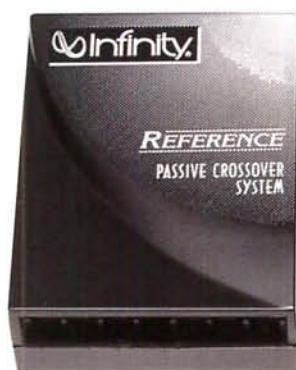
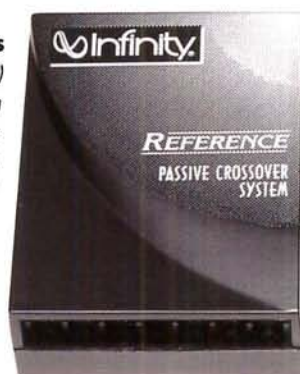
Power handling: 95 Watts

Frequency Response: 60-20,000Hz

Sensitivity: 90dB @ 2.83 Volts

Mounting Depth: 6.0 cm (2.375") Woofer

2.2 cm (0.9") Tweeter



Reference 500cs

Size: 13 cm (5-1/4")

2-Way Component Speaker System

Power handling: 75 Watts

Frequency Response: 80-20,000Hz

Sensitivity: 90dB @ 2.83 Volts

Mounting Depth: 5.4 cm (2.125") Woofer

2.2 cm (0.9") Tweeter

Reference 400cs

Size: 10 cm (4")

2-Way Component Speaker System

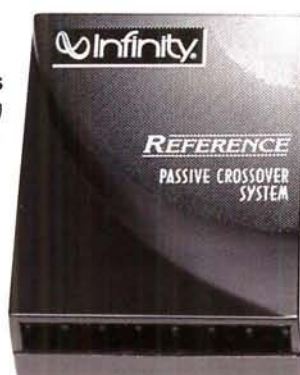
Power handling: 60 Watts

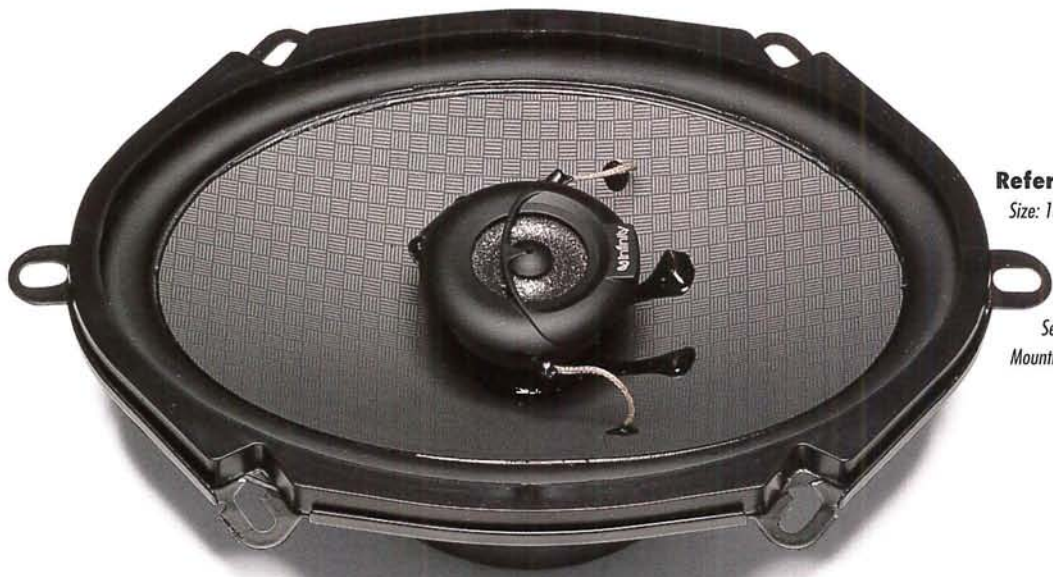
Frequency Response: 90-20,000Hz

Sensitivity: 89dB @ 2.83 Volts

Mounting Depth: 4.8 cm (1.875") Woofer

2.2 cm (0.9") Tweeter





Reference 5702cf

Size: 13.8/19.2 cm (5"x7"/6"x8")

2-Way Custom Fit Speaker

Power handling: 60 Watts

Frequency Response: 80-20,000Hz

Sensitivity: 91dB @ 2.83 Volts

Mounting Depth: 5.4 cm (2.125")



Reference 4612cf

Size: 10/15 cm (4"x6")

2-Way Custom Fit Speaker

Power handling: 35 Watts

Frequency Response: 85-20,000Hz

Sensitivity: 90dB @ 2.83 Volts

Mounting Depth: 4.8 cm (1.875")



Reference 3001cf

Size: 8.7 cm (3-1/2")

Full Range Custom Fit Speaker

Power handling: 25 Watts

Frequency Response: 100-18,000Hz

Sensitivity: 89dB @ 2.83 Volts

Mounting Depth: 3.8 cm (1.5")

Reference 1652cf

Size: 16.5 cm (6-1/2")
2-Way Custom Fit Speaker
Power handling: 65 Watts
Frequency Response: 60-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 6.3 cm (2.5")



Reference 1302cf

Size: 13 cm (5-1/4")
2-Way Custom Fit Speaker
Power handling: 60 Watts
Frequency Response: 65-20,000Hz
Sensitivity: 88dB @ 2.83 Volts
Mounting Depth: 5.7 cm (2.25")



Reference 1002cf

Size: 10 cm (4")
2-Way Custom Fit Speaker
Power handling: 45 Watts
Frequency Response: 80-20,000Hz
Sensitivity: 89dB @ 2.83 Volts
Mounting Depth: 4.5 cm (1.75")





Reference 1200w.ib/br

Size: 30 cm (12")

Infinite Baffle Application /

Bass Reflex Application

Power handling: 200 / 250 Watts

Frequency

Response: 45-600 / 25-600Hz

Sensitivity: 92 / 95dB @ 2.83 Volt

Mounting Depth: 12.7 cm (5")



Reference 1000w.ib/br

Size: 25 cm (10")

Infinite Baffle Application /

Bass Reflex Application

Power handling: 180 / 225 Watts

Frequency Response: 50-800 / 30-800Hz

Sensitivity: 90 / 92dB @ 2.83 Volts

Mounting Depth: 11.8 cm (4.625")

Reference 800w.ib/br

Size: 20 cm (8")

Infinite Baffle Application /

Bass Reflex Application

Power handling: 150 / 200 Watts

Frequency Response: 60-1,000 / 35-1,000Hz

Sensitivity: 89 / 91dB @ 2.83 Volts

Mounting Depth: 11.1 cm (4.375")



Reference 1001t

Size: 1" (2.5 cm)

Polycell Tweeter (Crossover included)

Power handling: 50 Watts

Frequency Response: 2,500-21,000Hz

Sensitivity: 94dB @ 2.83 Volts

Mounting Depth (Flush): 2.2 cm (0.9")

The Infinity Reference Series represents the most cost-effective upgrade path from any standard factory-installed system. Incorporating innovative Infinity technology from the Beta and Kappa Series, the Reference Series offers perfectly matched full-range, custom-fit or component solutions. The rigid, low-mass PolyCell tweeter dome employed in Infinity's best-selling studio monitor home speakers delivers sparkling high frequencies in the Reference Series. Our Tri-Laminate Hybrid cone bonds a cellulose substrate for low mass and a special polymer film for stiffness and damping, for loud and clear music, even from small amplifiers. And all Reference Series speakers employ rubber surrounds and reinforced Kapton voice coil formers for durability, enhanced performance and high power handling.

The unique Infinity approach to automotive sound does not stop at amplifiers and speakers. We know that the dedicated car stereo enthusiast wants to put the final, personal touch on his system.

For those more sophisticated in-car entertainment systems, Infinity offers compact, high performance electronic and passive crossover networks to significantly increase system flexibility.



Kappa 2xe

The Kappa 2xe is a versatile, high-performance crossover system that divides the signal between separate front, rear Subwoofer amplifiers. Each output allows independent level and continuously-variable frequency adjustments. Subwoofer output remains constant, regardless of the fader position.

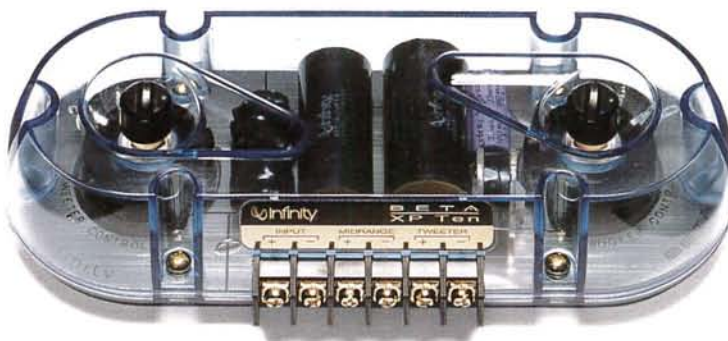
All Channels: Maximum Output Level: 10.0 Vrms

Front and Rear Channels (Stereo Circuits):

Filter Type: 2nd-order, high-pass, cont. variable 50-250Hz

Subwoofer Channels (Mono Circuit):

Filter Type: 3rd-order, low-pass, cont. variable 25-200Hz



Beta XP one and Beta XP ten

The Beta XP One teams with the Beta One tweeter and Beta mids while the XP Ten pairs with the Kappa 10t tweeter and Beta mids. Both feature a sophisticated Linkwitz-Riley 24dB/octave Acoustic Design with near perfect phase characteristics and steep filter slopes for cleanly defined sound.

Beta XP One - Specifications: Crossover Frequency: 1.5kHz

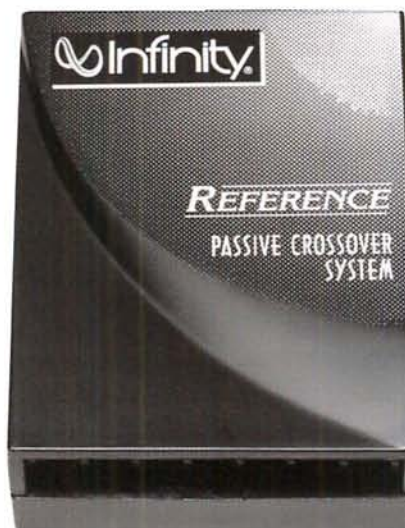
Beta XP Ten - Specifications: Crossover Frequency: 3.5kHz



Kappa 20XP Crossover

2-Way Passive crossover for Kappa 10t tweeter and Kappa midranges.

Crossover point: 3,500Hz
Filter, 2nd order



Reference 200XP Crossover

2-Way Passive crossover for Reference 100t tweeter and Reference midranges.

Crossover point: 3,500Hz
Filter, 1st order

Accessories

For the final decorative touch, Infinity also offers attractive speaker grille covers for systems that should be heard and not seen.



Beta grill *Beta grills for Beta Six, Beta Five and Beta Four.*



Kappa grill *Kappa grills for Kappa 12", 10" and 8" woofers (Also fit Reference woofers)*

BETA Series

| | One | Eight.dvc | Eight | Ten.dvc | Ten | Twelve.dvc | Twelve | Fifteen | Fifteen.dvc |
|-----------------|------|-----------|-------|---------|-------|------------|--------|---------|-------------|
| Fs (Hz) | 802 | 26 | 37 | 24 | 37 | 22 | 34 | 25 | 22 |
| Re (ohm) | 3.4 | 3.0 | 3.0 | 2.8 | 3.0 | 2.8 | 3.0 | 3.2 | 3.4 |
| Qms | 3.35 | 7.69 | 5.23 | 8.08 | 7.30 | 7.88 | 6.87 | 11.76 | 9.90 |
| Qes | 2.34 | 0.26 | 0.40 | 0.20 | 0.35 | 0.25 | 0.45 | 0.24 | 0.24 |
| Qts | 1.34 | 0.25 | 0.37 | 0.20 | 0.33 | 0.25 | 0.42 | 0.24 | 0.23 |
| Le @ 1kHz (mH) | - | 0.82 | 1.86 | 0.85 | 2.00 | 0.96 | 2.00 | 2.38 | 1.15 |
| Vas (liter) | - | 42.0 | 24.2 | 77.0 | 33.9 | 158.0 | 65.1 | 236.1 | 346.0 |
| Mms (grams) | - | 22.9 | 42.5 | 34.6 | 81.3 | 63.0 | 127.3 | 149.0 | 97.7 |
| Cms (µm/newton) | - | 644 | 426 | 455 | 222 | 431 | 175 | 277 | 358 |
| BL (t-m or N/A) | - | 7.10 | 8.70 | 8.70 | 12.86 | 7.80 | 13.42 | 17.32 | 12.10 |
| Xmax (mm) | - | 9.4 | 9.5 | 10.5 | 10.0 | 10.1 | 10.0 | 10.0 | 5.2 |
| Sd (cm^2) | - | 209 | 209 | 346 | 346 | 511 | 511 | 830 | 830 |

KAPPA Series

| | 10t | 80w.br | 80w.ib | 100w.br | 100w.ib | 120w.br | 120w.ib |
|-----------------|------|--------|--------|---------|---------|---------|---------|
| Fs (Hz) | 1881 | 28 | 38 | 26 | 38 | 21 | 32 |
| Re (ohm) | 3.7 | 3.0 | 3.0 | 3.0 | 3.1 | 3.0 | 3.1 |
| Qms | 1.39 | 7.13 | 5.75 | 7.82 | 7.26 | 8.57 | 6.75 |
| Qes | 4.97 | 0.29 | 0.52 | 0.29 | 0.53 | 0.32 | 0.60 |
| Qts | 1.09 | 0.28 | 0.48 | 0.28 | 0.49 | 0.31 | 0.55 |
| Le @ 1kHz (mH) | -- | 1.37 | 0.72 | 1.36 | 0.76 | 1.92 | 0.70 |
| Vas (liter) | -- | 39.5 | 27.0 | 74.6 | 51.9 | 225.8 | 131.8 |
| Mms (grams) | - | 53.6 | 41.3 | 82.9 | 54.8 | 101.0 | 75.1 |
| Cms (µm/newton) | - | 614 | 420 | 459 | 320 | 570 | 33 |
| BL (t-m or N/A) | - | 9.79 | 7.90 | 11.88 | 8.75 | 11.17 | 8.80 |
| Xmax (mm) | - | 5.0 | 7.5 | 8.0 | 7.5 | 8.0 | 8.0 |
| Sd (cm^2) | - | 201 | 201 | 340 | 340 | 510 | 510 |

REFERENCE Series

| | 810w. | 810w.ib | 1010w. | 1010w.ib | 1210w. | 1210w.ib |
|-------------------------------------|-------|---------|--------|----------|--------|----------|
| Fs (Hz) | 35 | 43 | 26 | 39 | 24 | 36 |
| Re (ohm) | 3.0 | 3.4 | 3.2 | 3.5 | 3.2 | 3.5 |
| Qms | 6.11 | 4.60 | 7.28 | 6.17 | 5.44 | 4.72 |
| Qes | 0.38 | 0.83 | 0.29 | 0.59 | 0.29 | 0.70 |
| Qts | 0.36 | 0.70 | 0.28 | 0.54 | 0.28 | 0.61 |
| Le @ 1kHz (mH) | 1.21 | 0.50 | 1.68 | 0.76 | 1.74 | 0.73 |
| Vas (liter) | 34.4 | 35.3 | 83.0 | 70.6 | 188.0 | 153.7 |
| Mms (grams) | 39.0 | 36.8 | 75.0 | 46.0 | 82.0 | 55.6 |
| Cms ($\mu\text{m}/\text{newton}$) | 535 | 513 | 491 | 365.4 | 512 | 351.5 |
| BL (t-m or N/A) | 8.15 | 5.43 | 11.73 | 8.14 | 11.63 | 7.89 |
| Xmax (mm) | 5.0 | 4.5 | 5.0 | 5.0 | 5.0 | 5.0 |
| Sd (cm^2) | 211 | 211 | 346 | 346 | 510 | 510 |

Infinity constantly strives to update and improve existing products, as well as create new ones. Therefore the specifications and construction details in this Infinity publication are subject to change without notice.



I ' v e G o t t h e





Patricia

