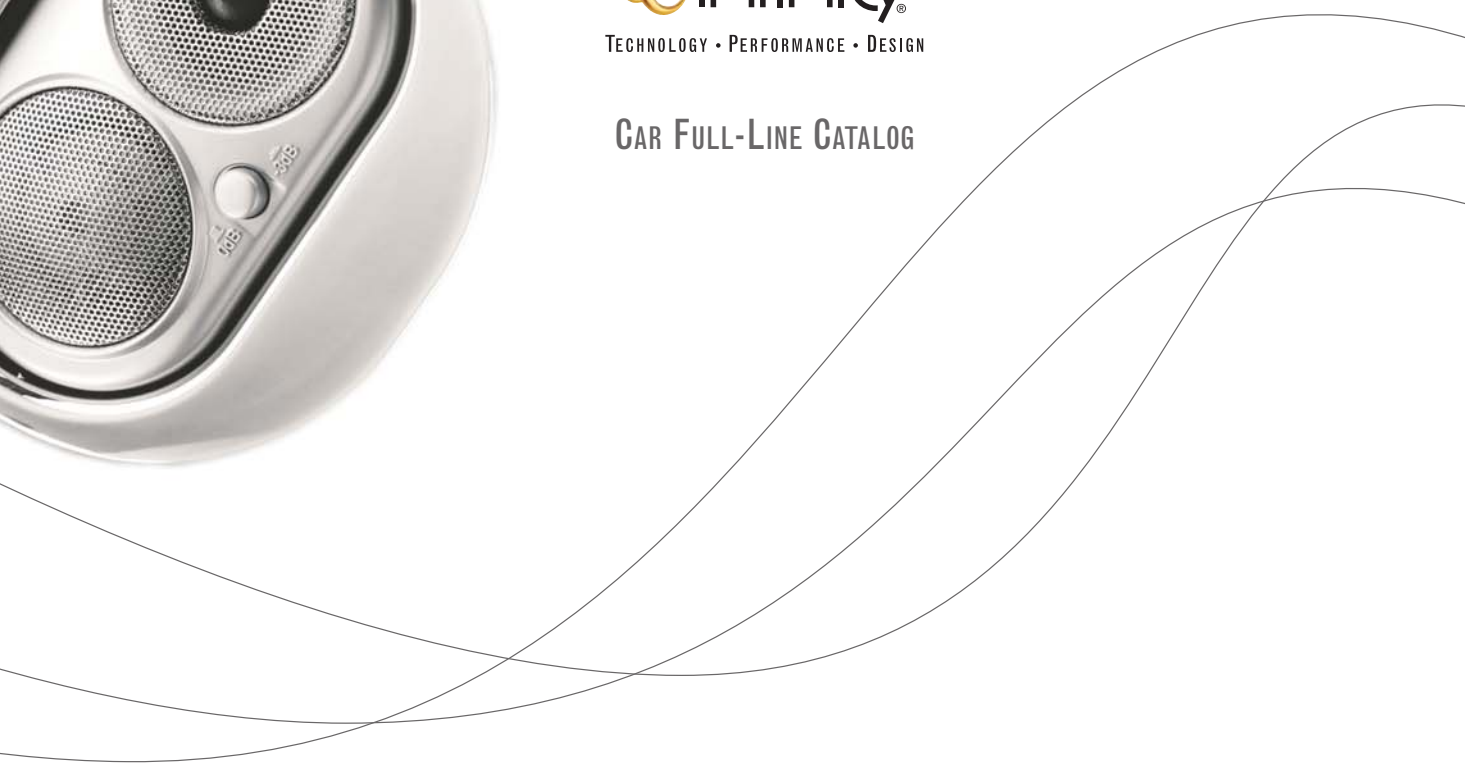




 **Infinity**[®]

TECHNOLOGY • PERFORMANCE • DESIGN

CAR FULL-LINE CATALOG



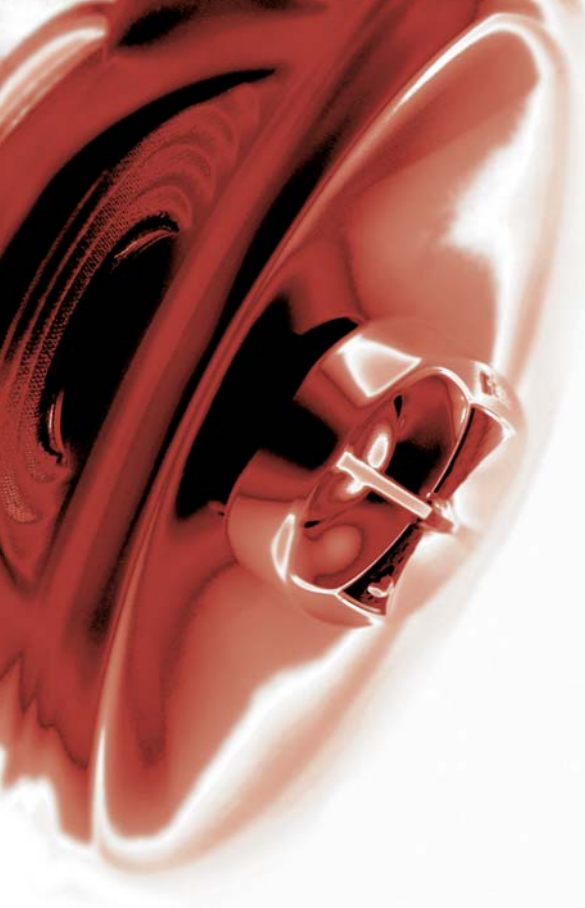


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car audio



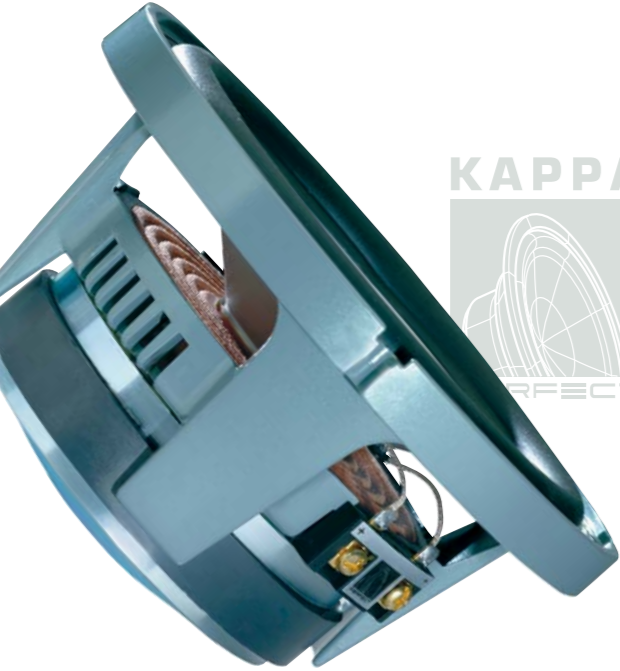
THE PRIMARY MISSION OF INFINITY® ENGINEERS HAS ALWAYS BEEN PERFECTING THE TECHNOLOGY OF SOUND REPRODUCTION.

YOUR PRIMARY MISSION? JUST TAKING IT ALL IN.

Looking for a more moving audio experience? Take Infinity® car audio for a ride. Innovative materials and breakthrough engineering have always put Infinity products out in front of the competition's. Infinity engineers were the first to use polypropylene as a speaker-cone material, and the first to build full-range Class D amplifiers (a full thirty years before they became popular). Infinity engineers also pioneered the use of textile-dome tweeters, samarium-cobalt speaker magnets, servo-controlled subwoofers, and EMIT® and EMIM™ planar tweeters and midrange speakers. Today, Infinity mobile audio loudspeakers feature MMD® tweeter diaphragms, Plus One® woofer cones, true 4-ohm impedance to extract all the power from any amplifier, selectable-impedance subwoofers, and world-renowned BassLink® powered subwoofers.

So expect the accuracy and detail that have been Infinity hallmarks for more than forty years, but be prepared for extreme output that may surprise you.





KAPPA® PERFECT COMPONENT SYSTEMS

- Deep-anodized-aluminum woofer cones – This material moves the first breakup mode to a high frequency well above the crossover region. The benefits are significantly reduced distortion in the system's output at high frequencies and maximized midrange clarity.
- Tweeters with deep-anodized-aluminum domes and rubber surrounds – Each dome is suspended in a high-loss rubber surround that is designed to damp dome resonances. The benefit is a smooth response, free from fatigue even at high output levels.
- Fourth-order Linkwitz-Reilly acoustic passive crossovers – Steep slopes minimize interaction between drivers. The benefit is a uniform system response in a variety of vehicle mounting locations.
- I-Mount™ (patent no. 5,859,917) tweeter-mounting system – This well-thought-out system allows easy and versatile installation of tweeters in each of the Kappa® component system kits.
- Die-cast frame – The proprietary die-cast frame accommodates long suspension travel and uses vented architecture, which provides superior cooling. The benefit of this is increased output with lower distortion.

PERFECT 5.1 COMPONENT SYSTEM

25mm Tweeter, 24dB-Octave Crossover, 130mm Woofer

- Deep-anodized woofer cone
- Focused-Field T-Pole Motor™
- Die-cast vented basket
- Flared, polished and vented polepiece
- 25mm Deep-anodized tweeter with rubber surround
- I-Mount™ (patent no. 5,859,917) tweeter-mounting system
- Crossover frequency: 3.5kHz, 24dB/oct.
- Linkwitz-Reilly acoustic alignment
- System impedance: 4 ohms
- Sensitivity: 89dB
- Frequency response: 80Hz – 23kHz, ±3dB
- Power handling, RMS: 100 watts
- Power handling, peak: 400 watts
- Mounting depth – woofer: 61mm
tweeter: 25mm
- Cutout diameter – woofer: 118mm
tweeter: 45mm

PERFECT 6.1 COMPONENT SYSTEM

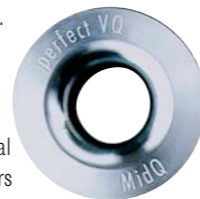
25mm Tweeter, 24dB-Octave Crossover, 160mm Woofer

- Deep-anodized woofer cone
- Focused-Field T-Pole Motor™
- Die-cast vented basket
- Flared, polished and vented polepiece
- 25mm Deep-anodized tweeter with rubber surround
- I-Mount™ (patent no. 5,859,917) tweeter-mounting system
- Crossover frequency: 3.5kHz, 24dB/oct.
- Linkwitz-Reilly acoustic alignment
- System impedance: 4 ohms
- Sensitivity: 90dB
- Frequency response: 75Hz – 23kHz, ±3dB
- Power handling, RMS: 100 watts
- Power handling, peak: 400 watts
- Mounting depth – woofer: 70mm
tweeter: 25mm
- Cutout diameter – woofer: 129mm
tweeter: 45mm



KAPPA PERFECT VARIABLE Q SUBWOOFER

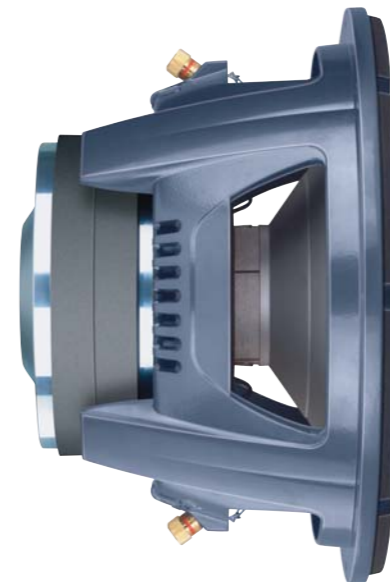
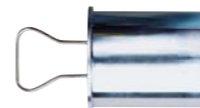
- Variable Q (patent no. 6,580,803) – The Kappa Perfect12 VQ subwoofer provides an innovative approach to adjusting Q. The woofer allows the motor strength to be varied using metal polepiece inserts. Q adjustments allow the woofer to be optimized for a particular enclosure or application and provide the user with exceptional performance for several applications in a single enclosure.
- Magnesium Metal Matrix (M³D™) woofer cone – This material is 20 times stiffer than aluminum, delivering superior stiffness and damping compared to traditional cone materials.
- Butylene-rubber one-piece surround and gasket – This material provides an optimal blend of elasticity and internal damping. The large roll offers good long-throw linearity with the proper amount of control and stability at excursion limits.
- Vented polepiece – This provides additional cooling to the motor structure. The subwoofer's thermal capabilities are augmented, thus increasing power handling.
- Spider-integrated tinsel leads – These enhance reliability and eliminate audible tinsel-lead slap.



PERFECT12 VQ

300mm Variable Q Subwoofer

- Magnesium Metal Matrix (M³D™) woofer cone
- Variable Q design (patent no. 6,580,803) includes two polepiece sleeves
- Flared, polished and vented polepiece
- Spider-integrated tinsel leads
- Single 4-ohm voice coil
- Sensitivity: 89dB
- Frequency response: 23Hz – 400Hz
- Power handling, RMS: 400 watts
- Power handling, peak: 1600 watts
- Mounting depth: 178mm
- Cutout diameter: 277mm



KAPPA MULTIELEMENTS AND COMPONENT SYSTEMS



- Reduced nominal impedance – Unlike competing models, Kappa speakers offer lower impedance, which results in higher sensitivity. Compatibility with standard head units is secured and highlighted by a dedicated logo on the beauty box.
- Woven-glass-fiber woofer cone material is extremely stiff, minimizing cone flex; this results in very low distortion and improved clarity – Infinity trademarks.
- Plus One woofer cones – This technology delivers a cone with more surface area than competing models of the same size. This increase can be as much as 30 percent, depending on the individual speaker model. The benefit is increased bass output and increased efficiency.
- Computer-optimized, voice-matched outboard passive crossovers – Each Kappa multielement and component system features an outboard crossover that has been voice-matched using audiophile-quality air core inductors and polypropylene capacitors. The result is flawless performance with incredible detail and accuracy.
- Tweeter-level control – Both the multielements and component systems feature a tweeter-level control, allowing you to optimize the response for either on or off axis.
- Edge-driven MMD-dome tweeters on coaxial systems and ultrawide-band UHF soft-(textile)-dome tweeter for accurate music reproduction from 2.5kHz up to 35kHz on all component systems. These are not commonly used W-domes,

- but fully edge-driven domes, like those found in better home audio speakers. The benefit is increased power handling and reduced distortion at high output levels. This technology also allows for better integration with the mid/woofer.
- Oversized voice coils – Each Kappa Series speaker model features a voice coil larger than those in competing models of the same size. This larger voice coil increases power handling. The benefit is high output with less distortion. The woofer distortion has also been dramatically reduced by an improved motor and spider design. The result is a clean sound, even when the speaker is played on higher levels.
- UniPivot™ technology – To ensure proper imaging, most Kappa Series multielements utilize a patented rotating tweeter (patent no. 6,002,780). So even if the speaker is mounted down low in the door, the soundstage can be brought up and optimized for the listener's location.
- Intermount III (patent no. 6,505,705) mounting system on 160mm/165mm (6-1/2") models – Allows for installation in all 160mm/165mm-(6-1/2")-hole size standards without the need to purchase additional adapters or mounting kits.
- I-Mount tweeter-mounting system – This well-thought-out system allows easy and versatile installation of tweeters in each of the Infinity component systems. The I-Mount system now features the Starfish™ adapter, an accessory that allows for mounting in factory tweeter locations.



OVERSIZED VOICE COILS



TWEETER-LEVEL CONTROL

PLUS ONE WOVEN-GLASS-FIBER WOOFER CONES



UNIPIVOT TECHNOLOGY TO ENSURE PROPER IMAGING

MATTE-BLACK GRILLE WITH REAL CLOTH MESH



kappa series



KAPPA MULTIELEMENTS



42.9i
100mm Two-Way Loudspeaker
 Plus One® (patent pending) woven-glass-fiber woofer cone
 Edge-driven MMD®-dome tweeter
 Direct-Connect crossover dongle
 Impedance: 2 ohms
 Sensitivity: 93dB
 Frequency response: 75Hz – 25kHz
 Power handling, RMS: 50 watts
 Power handling, peak: 150 watts
 Mounting depth: 47mm
 Cutout diameter: 90mm



52.9i
130mm Two-Way Loudspeaker
 Plus One® (patent pending) woven-glass-fiber woofer cone
 Edge-driven MMD®-dome tweeter with UniPivot™ (patent no. 6,002,780) technology
 Direct-Connect crossover dongle
 Tweeter-level adjustment on tweeter
 Impedance: 2 ohms
 Sensitivity: 94dB
 Frequency response: 55Hz – 25kHz
 Power handling, RMS: 55 watts
 Power handling, peak: 165 watts
 Mounting depth: 55mm
 Cutout diameter: 120mm



62.9i
160mm/170mm Two-Way Loudspeaker
 Plus One® (patent pending) woven-glass-fiber woofer cone
 Edge-driven MMD®-dome tweeter with UniPivot™ (patent no. 6,002,780) technology
 Direct-Connect crossover dongle
 Tweeter-level adjustment on tweeter
 Intermount III (patent no. 6,505,705) woofer-mounting system
 Impedance: 2 ohms
 Sensitivity: 95dB
 Frequency response: 45Hz – 25kHz
 Power handling, RMS: 75 watts
 Power handling, peak: 225 watts
 Mounting depth: 58mm
 Cutout diameter: 129mm



652.9i
165mm Two-Way Loudspeaker
 Plus One® (patent pending) woven-glass-fiber woofer cone
 Edge-driven MMD®-dome tweeter with UniPivot™ (patent no. 6,002,780) technology
 Direct-Connect crossover dongle
 Tweeter-level adjustment on tweeter
 Impedance: 2 ohms
 Sensitivity: 95dB
 Frequency response: 45Hz – 25kHz
 Power handling, RMS: 75 watts
 Power handling, peak: 225 watts
 Mounting depth: 60mm
 Cutout diameter: 144mm

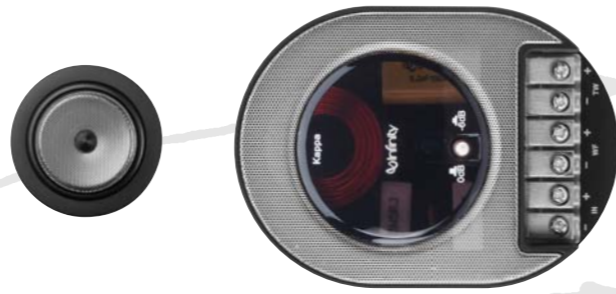


693.9i
6" x 9" Three-Way Loudspeaker
 Plus One® (patent pending) woven-glass-fiber woofer cone
 MMD®-dome tweeter and UHF-dome super tweeter
 Direct-Connect crossover dongle
 Tweeter-level adjustment on tweeter
 Impedance: 2 ohms
 Sensitivity: 96dB
 Frequency response: 35Hz – 30kHz
 Power handling, RMS: 110 watts
 Power handling, peak: 330 watts
 Mounting depth: 82mm
 Cutout: 149mm x 222mm

KAPPA



KAPPA COMPONENT SYSTEMS



10.9t

25mm UHF Tweeter

Edge-driven motor structure
I-Mount™ (patent no. 5,859,917)
tweeter kit with Starfish™ O.E.M.
adapter

Outboard passive crossover with
air core inductors and poly caps

Impedance: 2 ohms

Sensitivity: 93dB

Frequency response: 3.5kHz – 35kHz

Power handling, RMS: 50 watts

Power handling, peak: 150 watts
with supplied crossover

Mounting depth: 31mm

Cutout diameter: 60mm

10.9t



50.9cs

130mm Two-Way Component System

Plus One® (patent pending)
woven-glass-fiber woofer cone

Edge-driven UHF textile-dome tweeter

UHF textile-dome super tweeter

Outboard passive crossover with
air core inductors and poly caps

I-Mount™ (patent no. 5,859,917)
tweeter kit with Starfish™ O.E.M.
adapter

Tweeter-level adjustment

Impedance: 2 ohms

Sensitivity: 93dB

Frequency response: 55Hz – 35kHz

Power handling, RMS: 85 watts

Power handling, peak: 255 watts

Mounting depth: 55mm

Cutout diameter: 120mm



50.9cs

60.9cs

160mm/170mm Two-Way Component System

Plus One® (patent pending)
woven-glass-fiber woofer cone

Edge-driven-dome tweeter

UHF textile-dome super tweeter

Outboard passive crossover with
air core inductors and poly caps

I-Mount™ (patent no. 5,859,917)
tweeter
kit with Starfish™ O.E.M. adapter

Intermount III (patent no. 6,505,705)
woofer-mounting system

Tweeter-level adjustment

Impedance: 2 ohms

Sensitivity: 95dB

Frequency response: 45Hz – 35kHz

Power handling, RMS: 90 watts

Power handling, peak: 270 watts

Mounting depth: 61mm

Cutout diameter: 129mm



60.9cs

65.9cs

165mm Two-Way Component System

Plus One® (patent pending)
woven-glass-fiber woofer cone

Edge-driven-dome tweeter

UHF textile-dome super tweeter

Outboard passive crossover with
air core inductors and poly caps

I-Mount™ (patent no. 5,859,917)
tweeter
kit with Starfish™ O.E.M. adapter

Tweeter-level adjustment

Impedance: 2 ohms

Sensitivity: 93dB

Frequency response: 45Hz – 35kHz

Power handling, RMS: 90 watts

Power handling, peak: 270 watts

Mounting depth: 63mm

Cutout diameter: 144mm



65.9cs

KAPPA SUBWOOFER

The Kappa selectable-impedance 122.7w subwoofer takes technology, performance and design to a whole new level. By combining a neodymium motor, 75mm dual voice coils and medium-Q design, the Kappa .7 Series 122.7w sub provides superior performance in any enclosure type and with nearly any amplifier. To simplify system design and installation, this Kappa sub incorporates an impedance-selector switch. Now *that's* thinking!

- Neodymium motor with aluminum heatsink – Aluminum extrusion provides a heatsink for the motor's steel parts. Neodymium provides more magnetic energy in a smaller space, which reduces overall weight and is inherently magnetically "shielded."
- 75mm-Diameter voice coil – This larger surface area provides better thermal power handling than smaller voice coils.
- Impedance-selector switch – Provides easy configuration of voice coils. No more confusing series and parallel connections of voice coils (for single-woofer systems) and easier connection for multiwoofer systems.
- Screw-down terminal – Provides positive, reliable low-loss connection.

- Vented polepiece – Reduces air compression under the dustcap, which minimizes mechanical noise and provides more constant mechanical Q for reduced distortion.
- Proprietary stamped-steel basket – This basket design was developed for the Kappa 122.7w subwoofer's neodymium motor and terminals.
- Woven-glass-fiber cone – This cone material is extremely stiff, minimizing cone flex; this results in very low distortion and improved clarity – Infinity trademarks.

- Rubber surround – Provides better longevity and cone resonance damping than foam.
- Medium-Q design – Provides great performance in sealed, vented or band-pass enclosures. A sealed enclosure for the Kappa 122.7w subwoofer can be ≤30 percent of the recommended volume. An optimal vented box doesn't require super-long ports.



KAPPA 122.7W

300mm Selectable-Impedance Subwoofer

Woven-glass-fiber woofer cone
Neodymium motor with aluminum
heatsink

Impedance-selection switch

Vented polepiece

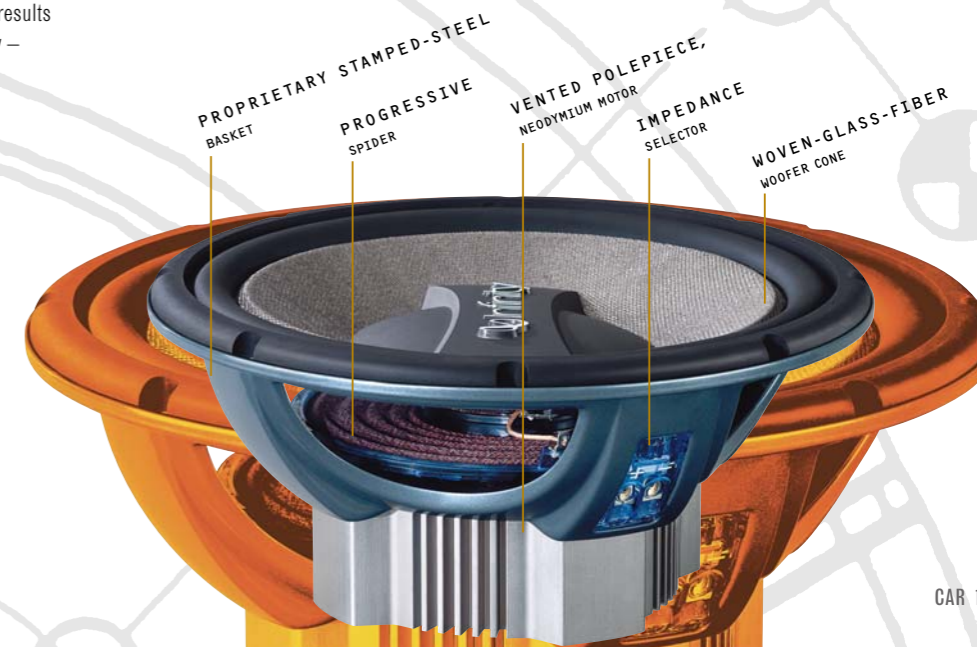
Impedance: 1 or 4 ohms

Power handling, RMS: 350 watts

Power handling, peak: 1400 watts

Mounting depth: 127mm

Cutout diameter: 283mm





CLASS D/DIRECTFET® TECHNOLOGY

Kappa amps feature high-power Class D circuit topology with DirectFET® transistors, a design that increases power output and overall efficiency, with improved heat transfer from the transistors to the chassis. So you enjoy better performance from significantly smaller amps.

DYNAMIC BASS OPTIMIZATION (DBO)

Available on the Kappa One amplifier, DBO is a proprietary variable subsonic filter with variable bass boost. Unlike conventional fixed-frequency filters, DBO conserves power at frequencies below 100Hz, protecting woofers in vented-box applications from overexcursion, and flattening response through the lowest octaves in sealed-box and infinite-baffle applications.

NOISE-CANCELING SIGNAL INPUTS

Kappa amps use differential-signal inputs with high common-mode noise rejection for all speaker-level and line-level outputs from source units. Because noise from the vehicle's alternator and other electrical components is radiated into the positive and negative leads of each signal input equally, amplifying the difference between the leads effectively cancels out the noise, leaving only the music.

NONSTOP THERMAL PROTECTION

As you'd expect, Kappa amps feature smart circuitry to protect your speakers in the event of short circuits or problems with your battery, alternator or voltage regulator. But Kappa amps also protect themselves against excess heat, with circuits that cool the amplifier down by gradually reducing output without shutting it down completely. So the music never stops, no matter how hot things start to get.

ULTRALOW-PROFILE DESIGN

At just 44mm high, Kappa amps will fit under most seats, or virtually anywhere else that's convenient.

KAPPA AMPLIFIERS



KAPPA ONE
800-Watt Mono Subwoofer Amplifier With Differential-Signal Inputs and Dynamic Bass Optimization



KAPPA FOUR
4-Channel Full-Range Amplifier With Differential-Signal Inputs


Easy-to-install, compact design
Variable electronic crossover
DBO – variable bass EQ, plus subsonic filter
Preamp outputs
500W RMS x 1, at 4 ohms $\leq 1\%$ THD + N
800W RMS x 1, at 2 ohms $\leq 1\%$ THD + N
1 Ohm, stable
THD + N: 0.05%
Signal-to-noise ratio: 85dBA (reference: 1W into 4 ohms)
Signal-to-noise ratio: 112dBA (reference: rated power into 4 ohms)
Frequency response: 20Hz – 320Hz (–3dB)
Dimensions (L x W x H): 329mm x 179mm x 44mm

Easy-to-install, compact design
Independently variable electronic crossover
Variable bass boost
Preamp outputs
125W RMS x 4, at 4 ohms $\leq 1\%$ THD + N
150W RMS x 4, at 2 ohms $\leq 1\%$ THD + N
300W RMS x 2, at 4 ohms $\leq 1\%$ THD + N
THD + N: 0.05%
Signal-to-noise ratio: 85dBA (reference: 1W into 4 ohms)
Signal-to-noise ratio: 106dBA (reference: rated power into 4 ohms)
Frequency response: 10Hz – 75kHz (–3dB)
Dimensions (L x W x H): 329mm x 179mm x 44mm



amps



- Plus One technology delivers a woofer cone with up to 30 percent more surface area than competing models with the same basket size. It also provides increased bass output and increased efficiency.
- Shallow-mount 165mm speakers – Many of today's cars have limited room in door-mounting locations. The 6532si model features a reduced mounting depth and is therefore an ideal solution for those cars.
- Reduced nominal impedance – Reference speakers offer lower impedance than competing models, resulting in higher sensitivity. Compatibility with standard head units is secured and highlighted by a dedicated logo on the beauty box. 
- Tweeter-level control switch – Mounted right on the tweeter faceplate, this switch allows easy adjustment (0/+3dB) of tweeter output level, even after installing the speakers in your car. Tweeter-level control is available on all models.
- Edge-driven textile-dome tweeters – This edge-driven configuration provides larger voice-coil diameter for superior power handling. The tweeters can be crossed over lower, providing a smoother transition between tweeter and midrange for enhanced midrange clarity.
- UniPivot rotating tweeter – To ensure proper imaging, Reference Series 5032i, 6032i and 6532i multielements include a patented rotating tweeter. Even if the speaker is mounted low in the door, the tweeter can be aimed at the listener for smooth on-axis response.

REFERENCE MULTIELEMENTS AND COMPONENT SYSTEMS



TECHNOLOGY • PERFORMANCE • DESIGN

The new Reference speakers feature the latest Infinity proprietary speaker technologies and are designed for clear, crisp sonic reproduction at competitive prices. They include reduced voice-coil impedance, designed to extract the most power possible from all amplifiers made to drive loads of 4 ohms or less. Moreover, all coaxial models are equipped with a tweeter-level control switch on the tweeter face for easy adjustment of the tweeter-output level, even after the speakers have been installed in the car.

UNIPIVOT TWEETER
TO ENSURE PROPER IMAGING



TEXTILE-DOME TWEETERS,
EDGE-DRIVEN



PLUS ONE
POLYPROPYLENE WOOFER CONES



TWEETER-LEVEL CONTROL
TO ADJUST HIGH-FREQUENCY RESPONSE

multielements



REFERENCE MULTIELEMENTS



TECHNOLOGY • PERFORMANCE • DESIGN



4032cf
100mm 2-Way Coaxial Speaker
Plus One® (patent pending) woofer cone
Impedance: 2 ohms
Sensitivity: 92dB
Frequency response: 85Hz – 21kHz
Power handling, RMS: 35 watts
Power handling, peak: 105 watts
Mounting depth: 48mm
Cutout diameter: 96mm



5032i
130mm 2-Way Coaxial Speaker
Plus One® (patent pending) woofer cone
Impedance: 2 ohms
Sensitivity: 92dB
Frequency response: 67Hz – 21kHz
Power handling, RMS: 45 watts
Power handling, peak: 135 watts
Grille included
Mounting depth: 57mm
Cutout diameter: 120mm



6032i
160mm 2-Way Coaxial Speaker
Plus One® (patent pending) woofer cone
Impedance: 2 ohms
Sensitivity: 93dB
Frequency response: 53Hz – 21kHz
Power handling, RMS: 60 watts
Power handling, peak: 180 watts
Grille included
Mounting depth: 52mm
Cutout diameter: 127mm



6532i
165mm 2-Way Coaxial Speaker
Plus One® (patent pending) woofer cone
Impedance: 2 ohms
Sensitivity: 93dB
Frequency response: 58Hz – 21kHz
Power handling, RMS: 60 watts
Power handling, peak: 180 watts
Grille included
Mounting depth: 60mm
Cutout diameter: 142mm



6532si
165mm 2-Way Coaxial Shallow-Mount Speaker
Plus One® (patent pending) woofer cone
Impedance: 2 ohms
Sensitivity: 93dB
Frequency response: 58Hz – 21kHz
Power handling, RMS: 45 watts
Power handling, peak: 135 watts
Mounting depth: 44mm
Cutout diameter: 142mm

9633i

6" x 9" Three-Way Loudspeaker
Plus One® (patent pending) woofer cone
UHF super tweeter and edge-driven, textile midrange
Impedance: 2 ohms
Sensitivity: 94dB
Frequency response: 46Hz – 30kHz
Power handling, RMS: 100 watts
Power handling, peak: 300 watts
Grille included
Mounting depth: 77mm
Cutout: 156mm x 226mm



REFERENCE COMPONENT SYSTEMS



1031t

25mm Textile-Dome Tweeter
Edge-driven motor structure
I-Mount™ (patent no. 5,859,917) tweeter kit with Starfish™ O.E.M. adapter
In-line crossover network
Impedance: 3 ohms
Sensitivity: 93dB
Frequency response: 2.5kHz – 21kHz
Power handling, RMS: 50 watts
Power handling, peak: 150 watts
Mounting depth: 22mm
Cutout diameter: 45mm

5030cs

130mm Two-Way Component System
Plus One® (patent pending) woofer cone
Edge-driven textile-dome tweeter
I-Mount™ (patent no. 5,859,917) tweeter kit with Starfish™ O.E.M. adapter
Outboard passive crossovers with tweeter-level adjustment
Impedance: 2 ohms
Sensitivity: 92dB
Frequency response: 67Hz – 21kHz
Power handling, RMS: 75 watts
Power handling, peak: 225 watts
Mounting depth: 57mm
Cutout diameter: 120mm

6030cs

160mm Two-Way Component System
Plus One® (patent pending) woofer cone
Edge-driven textile-dome tweeter
I-Mount™ (patent no. 5,859,917) tweeter kit with Starfish™ O.E.M. adapter
Outboard passive crossovers with tweeter-level adjustment
Impedance: 2 ohms
Sensitivity: 93dB
Frequency response: 53Hz – 21kHz
Power handling, RMS: 90 watts
Power handling, peak: 270 watts
Mounting depth: 52mm
Cutout diameter: 127mm

6530cs

165mm Two-Way Component System
Plus One® (patent pending) woofer cone
Edge-driven textile-dome tweeter
I-Mount™ (patent no. 5,859,917) tweeter kit with Starfish™ O.E.M. adapter
Outboard passive crossovers with tweeter-level adjustment
Impedance: 2 ohms
Sensitivity: 93dB
Frequency response: 58Hz – 21kHz
Power handling, RMS: 90 watts
Power handling, peak: 270 watts
Mounting depth: 60mm
Cutout diameter: 142mm

REFERENCE SUBWOOFER

- Proprietary basket – The unique basket design used on the Reference 1260w sub delivers a decrease in mounting depth while maximizing woofer excursion.
- Large-roll rubber surround – This material provides optimal cone-edge suspension and absorbs distortions that may travel up the cone edge. The benefit is a reduction in distortion.
- Progressive spider – The Reference Series 1260w subwoofer features a progressive spider, applying progressively more force as the cone travel approaches its limit. The result is a subwoofer in better control when pushed to extreme excursions.
- Proprietary tinsel-lead support – Prevents tinsel-lead slap and ensures that the leads stay attached to the cone, even at the woofer's excursion limits.
- Vented polepiece – Additional cooling of the motor structure is provided. The subwoofer's thermal capabilities are augmented, increasing power handling.

1260w

300mm Subwoofer
Longer voice coil for increased X_{max}
Extended polepiece for improved magnetic field symmetry and reduced distortion
Vented polepiece with inlet and outlet flares for reduced mechanical noise
Rubber magnet cover
Works in all enclosure types
Sensitivity: 93dB
Frequency response: 23Hz – 400Hz
Power handling, RMS: 300 watts
Power handling, peak: 1200 watts
Mounting depth: 162mm
Cutout diameter: 282mm



LARGE-ROLL RUBBER SURROUND

LONGER VOICE COIL

PROGRESSIVE SPIDER

EXTENDED AND VENTED POLEPIECE





REFERENCE SUBWOOFER ENCLOSURES

Reference Series subwoofer enclosures prove that great-sounding subwoofers do not have to be packed into unattractive boxes. The most important external feature of these enclosures is the elegantly designed and nicely backlit front panel with the classic Infinity look and feel. The tasteful color scheme lets these subwoofers shine in any car.

But it's not just the look that's stunning. Infinity engineers have integrated a technical innovation: The revolutionary Slipstream port maintains optimal performance at even the highest output levels, virtually eliminating port noise caused by turbulence and rectification at the mouth of the port. Reference enclosures also feature 18mm medium-density fibreboard (MDF) construction and high-quality binding-post terminals.



1240se
Single 300mm Preloaded Enclosure With Slipstream Port

Slipstream port delivers higher output potential than conventional ports and greatly reduced distortion – louder, cleaner bass
Power handling, RMS: 300 watts
Power handling, peak: 1200 watts
Sensitivity (2.83V/1m): 91dB
Frequency response: 33Hz – 300Hz
Impedance: 4 ohms
Dimensions (L x W x H): 534mm x 434mm x 414mm



1220de
Dual 300mm Preloaded Enclosure With Slipstream Port

Slipstream port delivers higher output potential than conventional ports and greatly reduced distortion – louder, cleaner bass
Power handling, RMS: 600 watts
Power handling, peak: 1800 watts
Sensitivity (2.83V/1m): 97dB
Frequency response: 30Hz – 300Hz
Impedance: 2 x 4 ohms
Dimensions (L x W x H): 914mm x 434mm x 414mm

- Unique front-baffle design – The new enclosures come with proprietary front grilles, offering maximum woofer protection and classic Infinity styling.
- Proprietary Slipstream port design – Small enclosures require long ports to offer decent low-frequency performance. The unique port design of these enclosures efficiently limits resulting air turbulence within the port, preventing annoying port noise.
- Single/dual 4-ohm voice coil – Allows easy connectivity with both bridged stereo and more powerful mono subwoofer amplifiers.
- Dual stacked magnets and vented polepieces – The high-power motor structure results in improved efficiency and increased thermal power-handling capabilities.
- Front lighting included – These enclosures include built-in LED lighting that illuminates the woofers' cones for a cool effect.
- Aluminum mounting feet – Dedicated mounting feet facilitate installation and maintenance of these heavy-duty enclosures in the trunk.
- 18mm Medium-density fibreboard construction – MDF provides superior reliability and reduced panel resonance when compared to the thinner particle-board material used in competitors' enclosures.

REFERENCE AMPLIFIERS

Reference Series amplifiers exemplify the unique blend of technology, performance and design long associated with Infinity products. The 2009 lineup includes a 4-channel full-range amplifier, a powerful mono subwoofer amplifier and a 5-channel amplifier that easily powers an entire car audio system. All full-range amplifier channels offer Class A/B circuitry for pristine, low-distortion performance. The amplifier channels designed to drive subwoofers pack plenty of high-efficiency Class D power in a small chassis, for easy mounting.

- Proprietary design featuring a skeletal aluminum frame with a silver satin finish, combined with a gun-metal-gray aluminum body.
- Dual blue backlit LED bars integrated in the center part of the heatsink construction.
- High-quality Direct-Connect terminals for both speaker and power-supply connections.
- Electronic crossover networks on all channels, fully variable, 20Hz – 320Hz.
- Auxiliary line-level outputs for easy installation of additional amplifiers.
- Included bass-level remote for subwoofer channels on 5-channel and mono models.



REFERENCE AMPLIFIERS



475a
4-Channel Full-Range Amplifier

75 Watts RMS x 4 channels at 4 ohms and $\leq 1\%$ THD + N
 Signal-to-noise ratio: 85dBA (reference 1 watt into 4 ohms)
 90 Watts RMS x 4 channels at 2 ohms, 14.4V supply and $\leq 1\%$ THD + N
 180 Watts RMS x 2 channels at 4 ohms, 14.4V supply and $\leq 1\%$ THD + N
 Dynamic power: 117 watts at 2 ohms
 Effective damping factor: 6.3 at 4 ohms
 Frequency response: 10Hz – 100kHz (–3dB)
 Maximum input signal: 6V
 Maximum sensitivity: 100mV
 12dB built-in variable electronic crossover
 Variable bass boost (0 to +6dB @ 50Hz)
 One pair full-range preamp outputs
 Port for future accessory products
 Dimensions (L x W x H): 360mm x 228mm x 68mm



5350a
5-Channel Amplifier

50 Watts RMS x 4 channels and 150 watts RMS x 1 channel at 4 ohms and $\leq 1\%$ THD + N
 Signal-to-noise ratio: 85dBA (reference 1 watt into 4 ohms)
 60 Watts x 4 channels, 300 watts x 1 channel at 2 ohms, 14.4V supply and $\leq 1\%$ THD + N
 Dynamic power: 89 watts x 4 and 332 watts x 1 at 2 ohms
 Effective damping factor: 6.3 at 4 ohms
 Frequency response: 10Hz – 100kHz (channels 1, 2, 3, 4), 10Hz to 302Hz (channel 5)
 Maximum input signal: 6V
 Maximum sensitivity: 100mV
 12dB built-in variable electronic crossover
 Variable bass boost (0 to +6dB @ 50Hz)
 Port for future accessory products
 Remote bass-level control included
 Dimensions (L x W x H): 421mm x 229mm x 69mm

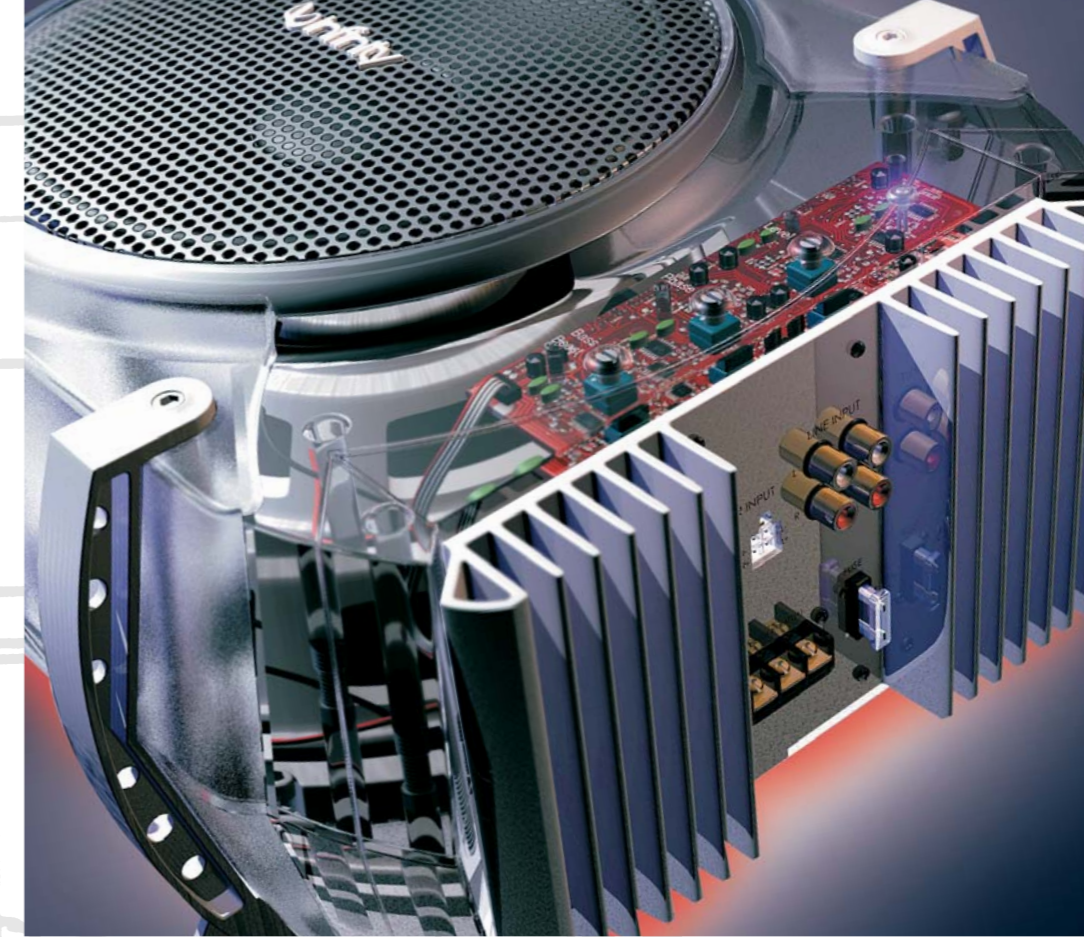


1600a
Mono Subwoofer Amplifier

400 Watts RMS x 1 channel at 4 ohms and $\leq 1\%$ THD + N
 Signal-to-noise ratio: 80dBA (reference 1 watt into 4 ohms)
 600 Watts RMS x 1 channel at 2 ohms, 14.4V supply and $\leq 1\%$ THD + N
 Dynamic power: 894 watts at 2 ohms
 Effective damping factor: 6.3 at 4 ohms
 Frequency response: 11Hz – 330Hz (–3dB)
 Maximum input signal: 6V
 Maximum sensitivity: 100mV
 12dB built-in variable low-pass electronic crossover
 Variable bass boost (0 to +6dB @ 50Hz)
 Port for future accessory products
 Remote bass-level control included
 One pair full-range preamp outputs
 Dimensions (L x W x H): 360mm x 228mm x 68mm



Adjustable Control



BASSLINK® SERIES

After inventing servo-controlled subwoofer systems, Infinity engineers adapted the technology developed for the finest home audio loudspeakers to create the BassLink® system, which set a new standard for in-vehicle bass reproduction. It features Bass EQ, a 0° or 180° phase switch – optimizing the phase to specific vehicle locations – and other innovations.

- User-adjustable controls allow listeners to set the system's response to achieve optimal performance based on the vehicle's cabin gain or transfer function. These controls include: a 0° or 180° phase switch; a continuously variable electronic low-pass filter that is adjustable between 70Hz and 170Hz; variable input sensitivity; and Bass EQ that provides for adjustments between +3dB and –6dB. At maximum gain, the system can accept inputs as low as 250mV.

BASSLINK®

200W Powered Subwoofer System

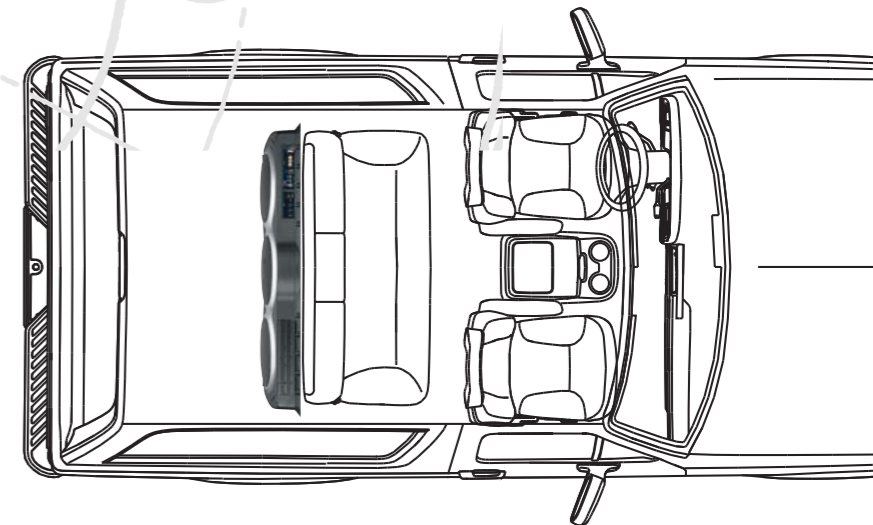
Onboard 200W Class D power amplifier
 250mm Subwoofer, 250mm passive radiator
 Variable electronic crossover (50Hz – 120Hz)
 Bass EQ (+3dB to –6dB at 45Hz)
 Included BassLink LC remote bass-level control
 Dimensions (L x W x H) – BassLink: 369mm x 318mm x 216mm
 Sub-Level Control (with housing): 56mm x 59mm x 23mm
 Sub-Level Control (without housing): 56mm x 34mm x 20mm

- The Infinity BassLink T™ subwoofer system has been developed to deliver great bass in pickup trucks, SUVs and hatchbacks. Its low-profile design allows it to be positioned in the confined space of a pickup truck, or behind the rear seats of a hatchback or SUV. Small in size but big in output, the BassLink T system produces enough bass to wake up the neighborhood.
- A 250mm subwoofer, two 250mm passive radiators and a 250-watt Class D amplifier are housed in a great-looking rigid polymer enclosure, all carefully engineered to work together as a unique, integrated system. The extremely versatile BassLink T system accepts both speaker- and line-level inputs, and it provides an internal low-pass filter, proprietary signal processing and abundant amplification.

BASSLINK T™

250W Powered Pickup/SUV/Hatchback Subwoofer System

Onboard 250W Class D power amplifier
 250mm Subwoofer, dual 250mm passive radiators
 Variable electronic crossover (70Hz – 170Hz)
 Bass EQ (+3dB to –6dB at 45Hz)
 Separate high-level and low-level inputs
 Included BassLink LC remote bass-level control
 Dimensions (L x W x H): 1026mm x 164mm x 366mm



TECHNICAL PARAMETERS

REFERENCE AMPLIFIERS

Specifications			4-Channel 475a	5-Channel 5350a	Mono Subwoofer 1600a
Output power @ 4 ohms and ≤1% THD + N			4 x 75W	4 x 50W + 1 x 150W	1 x 400W
Signal-to-noise ratio (ref. 1W into 4 ohms)			85dB	85dB	80dB
Output power @ 4 ohms, 14.4V and ≤1% THD + N			2 x 180W		
Output power @ 2 ohms, 14.4V and ≤1% THD + N			4 x 90W	4 x 60W + 1 x 300W	1 x 600W
Dynamic power			117W @ 2 Ohms	4 x 89W + 1 x 332W @ 2 Ohms	894W @ 2 Ohms
Effective damping factor @ 4 ohms			6.3	6.3	6.3
Frequency response (-3dB)			10Hz - 100Hz	10Hz - 100kHz (F/R) 10Hz - 302Hz (Sub)	11Hz - 330Hz
Maximum input signal			6V	6V	6V
Maximum sensitivity			100mV	100mV	100mV
Output regulation @ 4 ohms			0.21dB	0.12dB	0.12dB
Class			AB	AB (F/R), D (Sub)	D
Rated THD			0.04%	0.02% (F/R) 0.06% (Sub)	0.05%
Minimum speaker impedance			2 Ohms	2 Ohms	2 Ohms
Maximum current draw			72A	75A	58A
Fuse replacement			2 x 35A	2 x 40A	3 x 25A
Dimensions					
W			229mm	229mm	229mm
H			68mm	68mm	68mm
L			360mm	421mm	360mm
Crossover slope			12dB/Oct.	12dB/Oct.	12dB/Oct.
Variable crossover					
Channel 1/2			OFF	Yes	Yes
LPF			32Hz - 320Hz	32Hz - 320Hz	32Hz - 320Hz
HPF			32Hz - 320Hz	32Hz - 320Hz	
Channel 3/4			OFF	Yes	
LPF			32Hz - 320Hz	32Hz - 320Hz	
HPF			32Hz - 320Hz	32Hz - 320Hz	
Channel 5/6			OFF	Yes	
LPF				20Hz - 200Hz	
HPF				No	
Bass boost			Channel 1/2 0/-6dB	0/-6dB	0/-6dB
Channel 3/4			0/-6dB	0/-6dB	
Channel 5/6			0/-6dB	0/-6dB	
Preamp output			•	•	•
Output					
Stereo			•	•	•
Bridge			•	•	•
Remote bass-level control			•	•	•
Die-cast heatsink			•	•	•
Overheating protection			•	•	•
Overcurrent protection			•	•	•
Short-circuit protection			•	•	•
Low/high-voltage protection			•	•	•
RCA input			•	•	•
Gold-plated power terminals			•	•	•
Gold-plated speaker terminals			•	•	•
Gold-plated RCA terminals			•	•	•
Power-on indicator			•	•	•

KAPPA AMPLIFIERS

Specifications			KAPPA ONE	KAPPA FOUR
Output power @ 4 ohms and ≤1% THD + N			1 x 500W RMS	4 x 125W
Signal-to-noise ratio (ref. 1W into 4 ohms)			85dB	85dB
Output power @ 4 ohms, 14.4V and ≤1% THD + N				2 x 300W
Output power @ 2 ohms, 14.4V and ≤1% THD + N			1 x 800W	4 x 150W
Frequency response (-3dB)			20Hz - 320Hz	10Hz - 75kHz
Rated THD			0.05%	0.05%
Minimum speaker impedance			1 Ohm	2 Ohms
Dimensions				
W			179mm	179mm
H			44mm	44mm
L			329mm	329mm
Crossover slope			12dB/Oct.	12dB/Oct.
Variable crossover				
Channel 1/2			OFF	Yes
LPF			32Hz - 320Hz	32Hz - 320Hz
HPF			10Hz - 80Hz	32Hz - 320Hz
Channel 3/4			OFF	Yes
LPF				32Hz - 320Hz
HPF				32Hz - 320Hz
Bass boost			Channel 1/2 DB0, 0dB - 12dB	0dB - 12dB
Channel 3/4				
Preamp output			Yes	No
Die-cast heatsink			•	•
Overheating protection			•	•
Overcurrent protection			•	•
Short-circuit protection			•	•
Low/high-voltage protection			•	•
RCA input			•	•
Power-on indicator			•	•

SUBWOOFERS

Specifications	Kappa Perfect VQ	Kappa	Reference
	Perfect12 VQ	122.7w	1260w
Size	12"	12"	12"
	300mm	300mm	300mm
RMS power	400W	350W	300W
Max. power	1600W	1400W	1200W
Frequency response	23Hz - 400Hz	23Hz - 400Hz	23Hz - 400Hz
Sensitivity (dB/W/m)	89dB	92dB	93dB
Impedance	4 Ohms	1 or 4 Ohms selectable	4 Ohms
Voice-coil diameter	77mm	76mm	51mm
Cutout diameter (D)	277mm	283mm	282mm
Mounting depth (A)	178mm	127mm	162mm

Thiolo/Small parameters

Voice-coil DC resistance	Revc	3.42	1.0	3.59
Voice-coil DC inductance @ 1kHz	Levc	1.14	0.76	2.89
Driver radiating area	Sd (cm ²)	491	530	531
Motor force factor (BL)		15.55 (w/low-Q insert) 12.19 (w/mid-Q insert)	8.52	16.90
		9.67 (w/no insert)		
Compliance volume	Vas (liters)	96.43	98.3	82.96
Suspension compliance	Cms (>=m/N)	281.68	245	206
Moving mass, air load	Mms (grams)	182.7	243	222
Moving mass, diaphragm	Mmd (grams)	176.44	236	214
Free-air resonance	Fs (Hz)	22.19	20.6	23.50
Mechanical Q	Qms	10.29	7.35	6.99
Electrical Q (Qes)		0.36 (w/low-Q insert) 0.50 (w/mid-Q insert) 0.79 (w/no insert)	0.49	0.41
Total Q (Qts)		0.34 (w/low-Q insert) 0.47 (w/mid-Q insert) 0.74 (w/no insert)	0.456	0.39
Maximum excursion one-way	X _{max} (mm)	16.75	12.0	13
	X _{max} (in)	0.69	0.47	0.51

Recommended enclosures

A - Sealed enclosure (Figure 1)

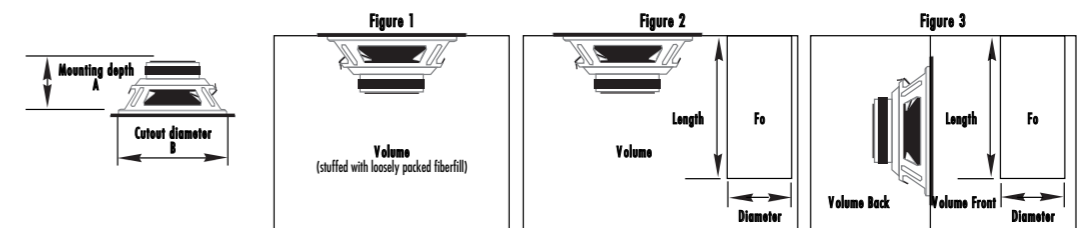
Volume		29L	35L
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B - Vented enclosure (Figure 2)

Volume		57L	56L
Port length		232mm	252mm
Port diameter		77mm	102mm

C - Band-pass enclosure (Figure 3)

Front volume		25L	35.5L
Back volume		37L	28.3L
Port length		247mm	204mm
Port diameter		102mm	102mm



The highlighted combinations will provide the best compromise between low-frequency extension/flat response and high output, and are considered optimum. Higher ripple values indicate a "boomier" sound and provide higher output at the expense of flat-frequency response and low-frequency extension.

A - Sealed enclosure (Figure 1)

Kappa Perfect12 VQ	Vb (Liters)	F3 (Hz)	Fmax (Hz)	Ripple	Insert	In-car level @ 20Hz
	11.5	60	100	2	Low	-4
	17	58	100	0	Low	0
	21	47	76	2	Mid	-2
	28	42	62	0.75	Mid	1
	35.5	35	50	2	None	3
	Infinite baffle	20	80	0	None	15

B - Vented enclosure (Figure 2)

Kappa Perfect12 VQ	Vb (Liters)	Port dia. (mm)	Port length (mm)	F3 (Hz)	Fmax (Hz)	Ripple	Insert	In-car level @ 20Hz
	50	100	368	27	36	1	Low	+11 @ 30
	64	100	356	25	32	1	Low	+12 @ 28
	64	100	356	28	38	3	Mid	+13 @ 30
	64	100	267	30	40	3.5	Mid	+15 @ 35
	86	100	406	22	32	1	Mid	+15 @ 22
	86	100	330	28	35	5	None	+16 @ 30

C - Band-pass enclosure (Figure 3)

Kappa Perfect12 VQ	Vbs (Liters)	Vbv (Liters)	Port dia. (mm)	Port length (mm)	F3 (Hz)	Fmax (Hz)	Insert	In-car bandwidth (Hz)	In-car level @ 20Hz
	28	28	100	267	38 - 68	51	Low	20 - 60	+0 @ 40
	57	34	100	173	40 - 70	55	Mid	20 - 65	+1.5 @ 26
	57	34	100	254	30 - 63	55	None	50 - 55	+6 @ 26



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