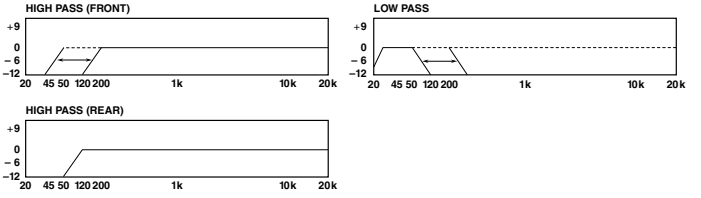
Integrated Amplifier Series

36501

Max. 650W

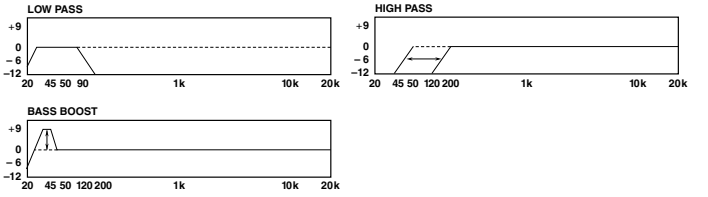
5/4 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter



36401

Max. 490W

4/3/2 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter



The Integrated Amplifier Series from ECLIPSE represent the highest value in their class. Keeping our reputation for the tradition of delivering the best audio quality in mobile audio, we have developed the new amplifiers to maximize your listening pleasure. ECLIPSE also offers the best warranty in the business, a responsibility consistent with our serious commitment to build quality amplifiers that deliver superior performance year after year of demanding use.

- **High-efficiency, high-energy MOSFET power supply**
- **Easily drives low impedance 2Ω loads**
- **Intelligent 7-way discrete protection circuitry**
- **Noise reduction with low distortion & ultra-low negative feedback**
- **High-current, high-speed output devices**
- **Audiophile-grade component selection**
- **Bass boost**
  - 3520/36201: 45Hz, 9dB ON/OFF
  - 36401: 45Hz, 0 ~ 9dB (F/R separate)
- **ChannelFlex crossover**
  - 36201/3520:
    Low-pass (50 ~ 200Hz) variable
  - 36401:
    Low-pass (90Hz) fix
    High-pass (50 ~ 200Hz)
    L/R independent
  - 36501:
    Low-pass (50 ~ 200Hz) variable
    High-pass (50 ~ 200Hz) variable [front]
    High-pass (120Hz) fixed [rear]
- **Epoxy composite PCB**
- **High-level input**
  - Add-on capability
- **Subwoofer input and output (36501)**

1911

Integrated Amplifier Bridge

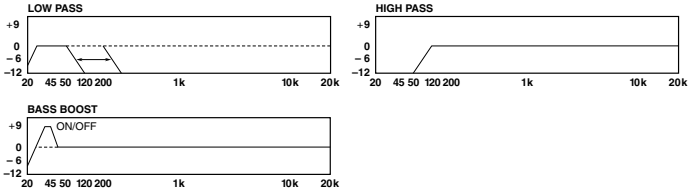
1901

Integrated Amplifier Bridge

36201

Max. 210W

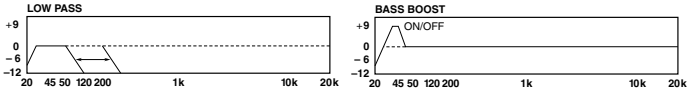
2/1 Channel Power Amplifier with ChannelFlex Crossover plus Subsonic Filter



3520

Max. 130W

2/1 Channel Power Amplifier with ChannelFlex Crossover plus Subsonic Filter



Specifications

		36501	36401	36201	3520
13.8V POWER SUPPLY					
Max. Power Output		105W × 4ch (2Ω) 230W × 1ch (Subwoofer)	123W × 4ch (2Ω)	105W × 2ch (2Ω)	65W × 2ch (2Ω)
Power Output (RMS Continuous Power)	2Ω	60W × 2ch (Front), 60W × 2ch (Rear) 120W × 1ch, 4Ω (Subwoofer)	70W × 4ch	70W × 2ch	45W × 2ch
	4Ω	40W × 2ch (Front) 40W × 2ch (Rear) 120W × 1ch (Subwoofer)	50W × 4ch	50W × 2ch	30W × 2ch
	4Ω bridged	120W × 2 (Front/Rear)	140W × 2ch	140W × 1ch	90W × 1ch
THD (Rated Power)	@ 2Ω stereo	0.008%	0.008%	0.008%	0.008%
	@ 4Ω stereo	0.004%	0.004%	0.004%	0.004%
	@ 4Ω bridged	0.008%	0.008%	0.008%	0.008%
Signal to Noise (A-weighted 4Ω)		105dB	105dB	105dB	105dB
Frequency Response	@ 4Ω stereo 20Hz ~ 20kHz	+0, –0.7	+0, –0.7	+0, –0.7	+0, –0.7
Crosstalk 4Ω		–70dB	–70dB	–70dB	–70dB
Slew Rate		10V/µs	10V/µs	10V/µs	10V/µs
Damping Factor	@ 60Hz	> 200	> 200	> 200	> 200
Input Sensitivity (preout)		0.2 ~ 5V	0.2 ~ 5V	0.2 ~ 5V	0.2 ~ 5V
Input Sensitivity (Amp-out)		0.4 ~ 10V	0.4 ~ 10V	0.4 ~ 10V	0.4 ~ 10V
Max. Current Consumption (4Ω)		50 amps	50 amps	25 amps	15 amps
CHANNELFLEX CROSSOVER					
High-Pass Frequency Range	12dB/octave	50 ~ 200Hz (Front) 120Hz (Rear)	50 ~ 200Hz	120Hz	—
Low-Pass Frequency Range	12dB/octave	50 ~ 200Hz (Subwoofer)	90Hz (Fixed)	50 ~ 200Hz	50 ~ 200Hz
Bass Boost (45Hz)		—	0 ~ 9dB	ON/OFF 9dB	ON/OFF 9dB
Subsonic Frequency Range 12dB/octave		20Hz	20Hz	20Hz	20Hz
Dimensions (W × H × D)		15.75″ × 2.04″ × 10.82″	10.82″ × 1.97″ × 10.82″	8.85″ × 1.97″ × 10.82″	6.30″ × 2.04″ × 10.82″

Designed, engineered and made in the U.S.A.


ECLIPSE

Speakers

SUBWOOFER 88000 Titanium DVC SERIES

The 88000 Titanium DVC series subwoofers were developed to meet the need for subwoofers that combine quick response, efficiency and very high SPL performance. These demanding specifications required the development of the radical new technologies used in engineering and building the Titanium series subwoofers.

Solid Titanium Cone

The solid titanium cone adds the best of this metal's properties to the subwoofer: very high tensile strength, high stiffness to mass ratio, excellent heat dispersion, and corrosion resistance. At high power levels, the titanium cone resists the cone flex that causes coloration and distortion, moving air efficiently throughout the full power handling range.

2-Inch Surround

The surrounds are two inches wide to accommodate speaker travel of 3.5 inches from rest to full excursion. Made of special polyether foam that is resistant to ultraviolet radiation and moisture, the surrounds have superior mechanical properties and the low mass needed to produce extremely high excursions.

Aluminum Voice Coil

The voice coil former is made of 8/1000" thick aluminum, much thicker than industry standard, to handle the stresses of the high power motor at large displacements. The voice coil wire is a high-temperature aluminum wire, used to minimize mass and maximize thermal radiation. Since the bond between cone and former is thermally conductive, the voice coil heat is quickly dissipated throughout the entire titanium cone. The superior conductivity combined with unparalleled heat dissipation of this voice coil and former assembly means more power transfer into the cone movement instead of wasted heat.

Dual Symmetrically Arranged Spiders

Two spiders designed with special non-linear Finite Element Analysis (FEA) software are spaced precisely apart to keep the voice coil centered in the motor structure. The woven-in tinsel lead wires are the ultimate in durability and power transfer. The synthetic fabric used to manufacture the spiders is four times stronger than conventional material used in most subwoofers.

High Force Motor Structure

The motor structure was designed to maximize the force versus displacement curve of high excursion drivers. The motor has a unique shape that results in 20% more force from the same magnets than is normally achieved. The magnetic field is very symmetrical above and below the magnetic gap, contributing to an audibly superior driver.

Cast Aluminum Frame

The aluminum frame forms the skeleton of the high performance Titanium series subwoofers. Venting below the spiders accommodates the enormous amounts of air that are moved during operation, as well as keeping the motor assembly free of any excess heat. The cast frame also acts as a heatsink to dissipate any additional heat produced from the subwoofers.

Triple-Stacked Magnet

ECLIPSE Titanium subwoofers feature a extra-long magnet and pole piece to accurately control woofer travel and enable high-power performance.

One-Piece Machined Back Plate and Pole Piece

The back plate and pole pieces of a Titanium series subwoofer is machined from a single block of low-carbon steel. This expensive process yields a component part of unparalleled precision and results in a highly efficient magnetic circuit.

Aero-Vented Pole

The pole piece of the subwoofer is aero-vented both outside and inside to facilitate the efficient flow of air into and out of the voice coil area for superior motor cooling. Aero-venting also reduces vent noise in high driver travel conditions.

The Advantage of Dual Voice Coil (DVC)

Dual Voice coil speakers are designed to maximize space for more flexibility during installation. A dual-voice coil speaker is essentially two speakers in one: two separate voice coils are connected to the amplifier. Depending on the impedance of each voice coil, the two can be combined in a parallel or series configuration to match the impedance ability of the amplifier. The dual voice coil design does not sacrifice system power handling or SPLs.

88150TiDVC 15″ Subwoofer (4Ω + 4Ω)

- Polyether Surround
- Titanium Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Triple-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 750W
- Music Power Handling: 1,500W
- Dual Voice Coil

Fs	27Hz
Qts	0.39
DCR	3.0Ω/coil
Vas	6.10 CuFt
Xmax (one way)	1.75″

DVC = DUAL VOICE COIL

88120TiDVC 12″ Subwoofer (4Ω + 4Ω)

- Polyether Surround
- Titanium Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Triple-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 750W
- Music Power Handling: 1,500W
- Dual Voice Coil

Fs	27Hz
Qts	0.30
DCR	3.0Ω/coil
Vas	3.20 CuFt
Xmax (one way)	1.50″

DVC = DUAL VOICE COIL

88100TiDVC 10″ Subwoofer (4Ω + 4Ω)

- Polyether Surround
- Titanium Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Triple-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 750W
- Music Power Handling: 1,500W
- Dual Voice Coil

Fs	26Hz
Qts	0.47
DCR	3.0Ω/coil
Vas	2.10 CuFt
Xmax (one way)	1.50″

DVC = DUAL VOICE COIL

SUBWOOFER 88000 DVC SERIES
88000 SERIES

The 88000 Series subwoofers feature aluminum cones that are rigid, lightweight and do not deform in the toughest conditions. The aluminum voice coil former couples directly with the aluminum cone for very efficient heat dissipation. The cone can travel a full 2.6 inches. The 88000 Series Subwoofers deliver SPLs equal to two or three common subwoofers with just a standard 1-inch travel capability and power handling exceeds 1000 watts at peak levels.

Aluminum Cone

Solid aluminum — an especially hard grade, 3003-H19 — has ultra-high stiffness-to-mass ratio for superb transient response. Parabolic cone geometry guarantees rigid construction, low distortion, and piston-like behavior at tremendous SPLs.

1-Inch Surround

A 1-inch wide, 1/2-inch tall surround provides an extended, controlled stroke. Santoprene synthetic rubber is weatherproof, very pliable and durable at all temperatures and has excellent damping characteristics to reduce cone resonance distortions.

3-Inch Voice Coil

Large 3-inch diameter, 4-layer voice coil for maximum power handling and driver control. Long 1.6-inch voice coil ensures extended and controlled cone stroke with low distortion.

Black Anodized Voice Coil Former

The all-aluminum voice coil former is black anodized for maximum heat absorption. It is bonded directly to the solid aluminum cone using thermally conductive adhesives. The cone serves as a heatsink for the voice coil for the highest power handling with minimal thermal compression.

Dual Mirror-Image Spiders

ECLIPSE employs two mirror-image spiders — one on top of the other. Mirror image configuration cancels minor push-pull variations. Additionally, dual spider geometry permits only perfectly aligned in/out voice coil travel with almost no lateral movement. Mounted vertically or horizontally, the subwoofers produce highly linear motion and low distortion.

- **Cast aluminum frame**
- **Double-stacked magnet**
- **One-piece machined back plate/pole piece**
- **Aero-vented pole**

Side view of 88000DVC and 88000 Series.

'98 Technology Award

88150DVC 15″ Subwoofer (4Ω + 4Ω)
88150.4 15″ Subwoofer (4Ω)

- Santoprene Surround
- Aluminum Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Double-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 500W
- Music Power Handling: 1,000W
- New Dual Voice Coil (88150DVC)

	88150DVC	88150.4
Fs	27Hz	22Hz
Qts	0.39	0.35
DCR	3.0Ω/coil	3.1Ω
Vas	6.10 CuFt	7.78 CuFt
Xmax (one way)	1.17″	1.17″

DVC = DUAL VOICE COIL

'98 Technology Award

88100DVC 10″ Subwoofer (4Ω + 4Ω)
88100.4 10″ Subwoofer (4Ω)

- Santoprene Surround
- Aluminum Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Double-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 500W
- Music Power Handling: 1,000W
- New Dual Voice Coil (88100DVC)

	88100DVC	88100.4
Fs	26Hz	22Hz
Qts	0.47	0.41
DCR	3.0Ω/coil	3.1Ω
Vas	2.01 CuFt	2.94 CuFt
Xmax (one way)	1.17″	1.17″

DVC = DUAL VOICE COIL

'98 Technology Award

88120DVC 12″ Subwoofer (4Ω + 4Ω)
88120.4 12″ Subwoofer (4Ω)

- Santoprene Surround
- Aluminum Cone
- Dual Mirror-Image Spiders
- Aluminum Voice Coil Former
- “Bottomless” Design
- Aero-Vented Pole Piece
- Cast Aluminum Frame
- Double-Stacked Magnet
- Small Sealed-Box Enclosure
- Continuous Power Handling: 500W
- Music Power Handling: 1,000W
- New Dual Voice Coil (88120DVC)

	88120DVC	88120.4
Fs	27Hz	22Hz
Qts	0.30	0.35
DCR	3.0Ω/coil	3.1Ω
Vas	3.20 CuFt	4.25 CuFt
Xmax (one way)	1.17″	1.17″

DVC = DUAL VOICE COIL

Subwoofers 87001DVC Series
87001 Series

Mica-Filled Polypropylene (MFP) Cone Material

ECLIPSE 87001 series subwoofers employ Mica-Filled Polypropylene (MFP) cone material for superior rigidity with low mass. The stiffness of MFP enables ECLIPSE woofers to maintain excellent distortion characteristics under intense power applications. The low mass of MFP ensures bass reproduction that quickly reacts to the input signal for "count the cycles" accuracy. MFP's lightness also increases driver efficiency, providing more output per given watt of amplifier power.

1-Inch Wide Santoprene Surround

One-inch wide, 1/2-inch tall surrounds provide a long, controlled stroke. Santoprene synthetic rubber is weatherproof, very pliable and durable at all temperatures and has excellent damping characteristics to reduce cone resonance distortions.

- **Kapton voice coil former**
  Handles a significant quantity of heat without deforming.
- **Long-throw bottomless motor structure**
  Prevents the speaker from "bottoming out" even during high-power dynamic peaks.
- **CONEX® dual spider with woven-in tinsel leadwires**
- **2-inch (2.5-inch 87151.4, 87151.8) voice coils**
- **Small sealed-box designs**
- **Cast aluminum frame**
- **Double-stacked magnet**

87151.4 15″ Subwoofer (4Ω)
87151.8 15″ Subwoofer (8Ω)

87121DVC
12″ Dual Voice Coil Subwoofer (4Ω + 4Ω)
87121.4 12″ Subwoofer (4Ω)
87121.8 12″ Subwoofer (8Ω)

87101DVC
10″ Dual Voice Coil Subwoofer (4Ω + 4Ω)
87101.4 10″ Subwoofer (4Ω)
87101.8 10″ Subwoofer (8Ω)

87081.4 8″ Subwoofer (4Ω)
87081.8 8″ Subwoofer (8Ω)

Side view of 87001 Series.

87001 Series speakers employ both a CONEX® Dual Spider, and a Double-Stacked Magnet.

Features

- 1″ santoprene surround
- One-piece Mica-Filled Polypropylene cone (MFP)
- CONEX® dual spider with woven-in tinsel leadwires
- Kapton voice coil former
- 4-layer long-throw voice coil
- "Bottomless" design
- Vented pole piece
- Cast aluminum frame
- Double-stacked magnet
- Small sealed-box enclosure

CONEX®: Registered trademark of Teijin Ltd.

	87151.4	87151.8	87121DVC	87121.4	87121.8	87101DVC	87101.4	87101.8	87081.4	87081.8
Fs	23Hz	23Hz	27Hz	27Hz	27Hz	30Hz	30Hz	30Hz	40Hz	40Hz
Qts	0.30	0.30	0.51	0.43	0.43	0.53	0.44	0.44	0.57	0.57
DCR	4.0Ω	7.6Ω	3.6Ω + 3.6Ω	4.0Ω	7.2Ω	3.6Ω + 3.6Ω	4.0Ω	7.2Ω	4.0Ω	7.2Ω
Vas	4.5 Cuft	4.8 Cuft	1.6 Cuft	1.85 Cuft	1.95 Cuft	0.76 Cuft	0.85 Cuft	0.95 Cuft	0.26 Cuft	0.26 Cuft
Xmax (one way)	0.75″	0.75″	0.73″	0.73″	0.73″	0.73″	0.73″	0.73″	0.73″	0.73″
Continuous Power Handling	400W	400W	300W	300W	300W	300W	300W	300W	300W	300W
Music Power Handling	800W	800W	600W	600W	600W	600W	600W	600W	600W	600W

DVC = DUAL VOICE COIL

Subwoofers 86000DVC Series
86000 Series

'01 Product of the Year

- Mica-Filled Polypropylene (MFP) cone material
- 3/4-inch wide santoprene surround
- Kapton voice coil former
- Long-throw bottom-less motor structure
- CONEX® dual spider
- Small sealed-box designs
- Concave inverted dust cap
- Double-stacked magnet

86120DVC
12″ Dual Voice Coil Subwoofer (4Ω + 4Ω)
86120.4 12″ Subwoofer (4Ω)
86120.8 12″ Subwoofer (8Ω)

86100DVC
10″ Dual Voice Coil Subwoofer (4Ω + 4Ω)
86100.4 10″ Subwoofer (4Ω)
86100.8 10″ Subwoofer (8Ω)

86080.4 8″ Subwoofer (4Ω)
86080.8 8″ Subwoofer (8Ω)

Side view of 86000DVC Series.

Both 86000DVC & 86000 Series employ CONEX® Dual Spider Santoprene Surrounds, Double-Stacked Magnet and long-throw Bottom-less Motor Structure.

Features

- 3/4″ santoprene surround
- Mica-Filled Polypropylene cone (MFP)
- CONEX® dual spider
- Kapton voice coil former
- 4-Layer long-throw voice coil
- "Bottom-less" design
- Inverted dust cap
- Vented pole piece
- Small sealed-box enclosure

CONEX®: Registered trademark of Teijin Ltd.

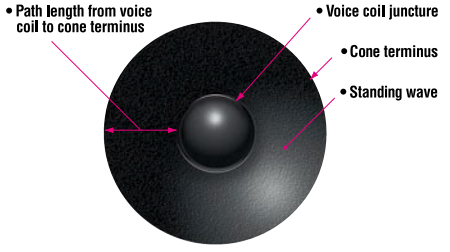
	86120 DVC	86120.4	86120.8	86100 DVC	86100.4	86100.8	86080.4	86080.8
Fs	28Hz	28Hz	30Hz	35Hz	32Hz	34Hz	40Hz	43Hz
Qts	0.68	0.75	0.70	0.73	0.88	0.85	1.12	1.15
DCR	3.8Ω × 2	4.5Ω	8.0Ω	3.8Ω × 2	4.5Ω	7.2Ω	4.5Ω	7.2Ω
Vas	3.45 Cuft	3.06 Cuft	3.31 Cuft	1.59 Cuft	1.44 Cuft	1.17 Cuft	0.39 Cuft	0.38 Cuft
Xmax (one way)	0.99″	0.99″	0.99″	0.89″	0.89″	0.89″	0.82″	0.82″
Continuous Power Handling	170W	170W	170W	150W	150W	150W	150W	150W
Music Power Handling	350W	350W	350W	300W	300W	300W	300W	300W

DVC = DUAL VOICE COIL

Component Series Speakers

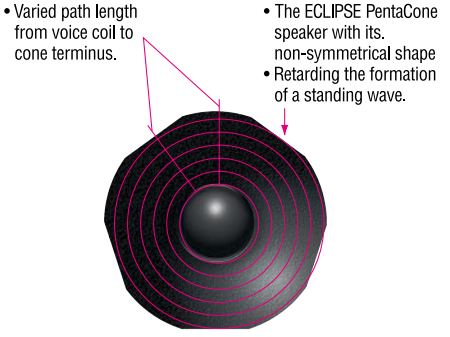
The ECLIPSE Component Series speakers are renowned for their accurate sound reproduction. Each set features PentaCone geometry: a technology that dramatically reduces driver-unit distortion, making way for clear uncolored midrange and smooth extended highs.

PentaCone technology: reduces distortion, enhances clarity



Like ripples in a perfectly round pond, energy from the voice coil travels to the cone perimeter and reflects toward the center again and again. This creates a standing wave. The listener detects coloration and lack of clarity.

Other speaker cones have a perfectly round terminus, where the cone is joined with the surround. When musical impulses from the voice coil drive the cone at its apex, shock waves travel outward to the edge of the cone. The problem is that this energy is not completely absorbed by even a high-quality rubber surround. A significant amount of energy reflects back into the cone. As a result, a standing wave distortion (resonant signature) is created that the ear interprets as "harshness."



The ECLIPSE PentaCone design keeps standing waves from forming by varying the path length from voice coil to cone terminus.

8062 6-1/2˝ Driver with 3/4˝ Silk Dome Tweeter & Crossover

Midrange driver
- PentaCone
- Wide-dispersion curvilinear cone
- 6-leg cast magnesium basket
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Flat spider
- Porous spider material
- 1-1/4˝ voice coil
- Vented aluminum voice coil former
- Narrow voice coil gap
- Vented pole piece
- Grilles included

3/4˝ silk dome tweeter
- Neodymium magnet
- Vented aluminum voice coil former
- 3/4˝ silk dome
- Ferro-fluid filled voice coil gap
- Flush & angle mount kits included

Passive crossovers
- Driver-specific crossover network
- Butterworth 12dB per octave high pass/low pass filters
- Tweeter protection circuit
- Air core inductors
- Designed without resistors

Other features
- Frequency Response: 50Hz~22kHz, ±3dB
- Continuous Power Handling: 85W
- Music Power Handling: 170W
- Mounting Depth: 2-7/8˝

Magnesium Frame Woofer

The curvilinear cone design provides much better off 2-axis performance. In cases where the tweeter is mounted high in the door (closer to the ear) and the woofer is in the lower part of the door, response from the woofer will be off-axis in relation to the tweeter. The curvilinear cone of the ECLIPSE woofer results in a much more linear response over a broader listening area. This design helps precisely match ECLIPSE tweeters and mid-woofers.

3/4˝ Titanium Dome Tweeter

- **Neodymium magnet**
  Smaller size and better efficiency than ferrite material allows for ease of even "trickier" installations.
- **Vented aluminum voice coil former**
  Quickly dissipates heat for high-power applications.
- **Ferro-fluid filled voice coil gap**
  Helps to keep the voice coil cool and improve frequency response.

Driver-Specific Passive Crossover Network

- **Air core inductors (coils)**
  Reducing distortion dramatically.
- **Metalized film capacitors (high pass)**
  Metalized film capacitors between mid and tweeter offer much lower high frequency distortion than commonly used electrolytic or poly capacitors.
- **High-power thermister tweeter protection**
  Solid state protection that remains neutral when not needed. Allows the speaker system to handle high power safely.
- **No resistors**
  ECLIPSE crossovers employ no resistors to preserve sonic purity. Engineers have matched tweeter and midrange efficiency, making possible a crossover that lets the listener hear all of the speaker quality with minimal crossover distortion.
- **Crossover input and output terminals**
  Gold-plated to prevent corrosion.

8052 5″ Driver with 3/4″ Silk Dome Tweeter & Crossover

Midrange driver
- PentaCone
- Wide-dispersion curvilinear cone
- 6-leg cast magnesium basket
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Flat spider
- Porous spider material
- 1″ voice coil
- Vented aluminum voice coil former
- Narrow voice coil gap
- Vented pole piece
- Grilles included

3/4″ silk dome tweeter
- Neodymium magnet
- Vented aluminum voice coil former
- 3/4″ silk dome
- Ferro-fluid filled voice coil gap
- Flush & angle mount kits included

Passive crossovers
- Driver-specific crossover network
- Butterworth 12dB per octave high pass/low pass filters
- Tweeter protection circuit
- Air core inductors
- Designed without resistors

Other features
- Frequency Response: 65Hz~22kHz, ±3dB
- Continuous Power Handling: 75W
- Music Power Handling: 150W
- Mounting Depth: 2-3/8″

8042 4-1/2″ Driver with 3/4″ Silk Dome Tweeter & Crossover

Midrange driver
- PentaCone
- Wide-dispersion curvilinear cone
- 6-leg cast magnesium basket
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Flat spider
- Porous spider material
- 1″ voice coil
- Vented aluminum voice coil former
- Narrow voice coil gap
- Vented pole piece
- Grilles included

3/4″ silk dome tweeter
- Neodymium magnet
- Vented aluminum voice coil former
- 3/4″ silk dome
- Ferro-fluid filled voice coil gap
- Flush & angle mount kits included

Passive crossovers
- Driver-specific crossover network
- Butterworth 12dB per octave high pass/low pass filters
- Tweeter protection circuit
- Air core inductors
- Designed without resistors

Other features
- Frequency Response: 85Hz~22kHz, ±3dB
- Continuous Power Handling: 50W
- Music Power Handling: 100W
- Mounting Depth: 2-1/16″

8701 Line Source Component Speakers

The 8701 Line Source Component Speakers feature three competition-caliber drivers per side with a computer optimized, audiophile-grade, three-way passive crossover. It is the ultimate front stage system. Timbre, stage, image, micro and macro dynamics. Fast response with no fatigue. ECLIPSE Research and Development took two years to adapt this legendary home technology specifically for the serious mobile audio enthusiast.

3/4˝ Silk Dome Neodymium Tweeter

The 8701 Line Source system includes the ECLIPSE proprietary 3/4-inch silk dome tweeter, specially dampened for smooth, extended treble response. Neodymium magnet structure ensures a minimal driver size to accommodate creative installation techniques. Ferro-fluid cools the voice coil for high power applications.

6-1/2˝ Kapton Planar Midrange

This technology is well-received by audiophiles for lifelike dynamics, tonal accuracy and a vivid, three-dimensional soundfield. The 6-1/2˝ midrange employs a 1-1/4-inch × 6-inch flat Kapton Diaphragm stretched taut between two arrays of super charged magnets. Copper traces similar to those found on a PCB are bonded to the Diaphragm and act as an integral “voice coil” - resulting in a driver whose piston and motor are one lightweight physical unit. A very broad frequency range reproduces more music from just one point in space that is free from crossover phase induced problems. Imaging, speed, clarity and natural ambiance are the striking hallmarks of this midrange element.

8701 **3-Way Line Source System**

- 6-1/2˝ woofer
- 6-1/2˝ kapton diaphragm midrange
- 3/4˝ silk dome tweeter
- Driver-specific passive crossover network
- Frequency response: 50~22,000Hz
- Continuous power handling: 85W
- Music power handling: 170W

6-1/2˝ Magnesium Frame Woofer

The 8701 Line Source system front stage includes the woofer found in the ECLIPSE Component Series separates. This driver features a solid cast magnesium frame, a rare metal used extensively in aerospace engineering for its superior strength and light weight. ECLIPSE uses magnesium to maintain the exceedingly precise tolerances specified in this efficient woofer. The cone employs a light, low-resonance, weatherproof mica-filled polymer.A butyl rubber surround — an audiophile choice for its inherent damping characteristics and durability — terminates the cone. Other costly techniques such as the use of a large diameter 1-1/4-inch vented aluminum voice coil former, flat, porous spider material, very narrow voice coil gap, and vented magnet pole all ensure efficient power handling with minimal thermal compression.

Driver-Specific Passive Crossover Network

Every ECLIPSE speaker system features a passive crossover that is computer-optimized and specific to each model. The air core inductors found in ECLIPSE crossovers promote higher power handling and lower distortion, and the oxygen-free heavy gauge winding allows all the music to come through. Metalized film capacitors in the high-pass section respond quickly, allowing high frequency instruments and harmonics to be reproduced with much lower distortion and airier definition.

Point Source Series Speakers

The Point Source concept combines superior quality music reproduction with ease of installation. The Point Source systems are made with the finest quality components: curvilinear mica-filled polypropylene cones, butyl rubber surrounds, flat spiders, Kapton voice coil formers, silk dome tweeters with neodymium magnets and ferro-fluid cooling.

The acoustic ideal — point source propagation of all frequencies — has been achieved by mounting the tweeter concentrically within the woofer voice coil. This design helps to more accurately align high and low frequency arrival time and phase. Point Source drivers are equipped with model-specific, competition-grade crossover networks. The result is uncommonly accurate imaging and sound stage re-creation.

Center-mounted tweeter

The acoustic ideal — point source propagation of all frequencies — has been achieved by mounting the tweeter concentrically within the woofer voice coil.

Competition — grade crossovers

Point Source speakers feature integrated crossover networks mounted to the woofer for simplified installation.

AUTO SOUND GRAND PRIX AWARD AudioVideo

'00 Product of the Year

89940 6 × 9″ Point Source

- Continuous Power Handling: 85W
- Music Power Handling: 170W
- Frequency Response: 40Hz~20kHz
- Concentrically Mounted: Efficiency-Matched Components
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Kapton voice coil former
- 1″ ferro-fluid cooled neodymium silk dome tweeter
- Model-specific computer-optimized outboard crossover
- Tweeter protection circuit
- Aluminum power handling tweeter post
- Mounting Depth: 3-7/16″

89740 5 × 7″ Point Source

- Continuous Power Handling: 50W
- Music Power Handling: 100W
- Frequency Response: 65Hz~20kHz
- Concentrically Mounted: Efficiency-Matched Components
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Kapton voice coil former
- 3/4″ ferro-fluid cooled neodymium silk dome tweeter
- Model-specific computer-optimized outboard crossover
- Tweeter protection circuit
- Aluminum power handling tweeter post
- 6 × 8 adapter plate included
- Mounting Depth: 3-7/16″

89640 6-1/2″ Point Source

- Continuous Power Handling: 50W
- Music Power Handling: 100W
- Frequency Response: 70Hz~20kHz
- Concentrically Mounted: Efficiency-Matched Components
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Kapton voice coil former
- 3/4″ ferro-fluid cooled neodymium silk dome tweeter
- Model-specific computer-optimized outboard crossover
- Tweeter protection circuit
- Aluminum power handling tweeter post
- Mounting Depth: 2-3/8″

89540 5-1/4″ Point Source

- Continuous Power Handling: 40W
- Music Power Handling: 80W
- Frequency Response: 80Hz~20kHz
- Concentrically Mounted: Efficiency-Matched Components
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Kapton voice coil former
- 3/4″ ferro-fluid cooled neodymium silk dome tweeter
- Model-specific computer-optimized outboard crossover
- Tweeter protection circuit
- Aluminum power handling tweeter post
- Mounting Depth: 2-5/16″

89440 4″ Point Source

- Continuous Power Handling: 40W
- Music Power Handling: 80W
- Frequency Response: 90Hz~20kHz
- Butyl rubber surround
- Mica-Filled Polypropylene cone (MFP)
- Kapton voice coil former
- 3/4″ ferro-fluid cooled neodymium silk dome tweeter
- Model-specific computer-optimized outboard crossover
- Tweeter protection circuit
- Aluminum power handling tweeter post
- 4 × 6 adapter plate included
- Mounting Depth: 2-1/16”

Integrated Series Speakers

ECLIPSE Integrated Series speakers are integrated, concentric units that are designed to replace factory speakers to gain significantly better music fidelity. Each features a center-mounted tweeter for balanced, on-axis reproduction of music.

Mica-Filled Polypropylene Cone Material (MFP)

The ECLIPSE speaker cone is mica-filled polypropylene, which causes the speaker to remain rigid under intense power, ensuring distortion-free performance.

Butyl Rubber Surround

The butyl rubber surround allows linear cone excursion and dampens cone resonance. This ensures undistorted dynamic peaks and clarity at all levels.

Kapton Voice Coil Former

Handles a large amount of heat without deforming.

Tweeter Protection

A solid state device protects the speaker system from power overloads. This device will momentarily shut down the tweeter circuit, and will automatically reset when the normal condition resumes.

Small Neodymium Tweeter

The use of a neodymium magnet improves speaker efficiency.

Angled Tweeter (82641 and 82541)

The tweeter is tilted towards the listening position in the vehicle. This dramatically improves overall frequency response for the listener.

83941 6 × 9″ 3-Way

Woofer Size	6″ × 9″
Continuous Power Handling	75W
Music Power Handling	150W
Frequency Response	50Hz ~ 20kHz
Sensitivity	96dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Midrange Cone	Mylar
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Midrange Magnet Material	Ferrite
Mounting Depth	3-1/16″

New improved bottom plate for higher efficiency

84041 4 × 10″ 2-Way

Woofer Size	4″ × 10″
Continuous Power Handling	35W
Music Power Handling	70W
Frequency Response	65Hz ~ 20kHz
Sensitivity	94dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	2-3/8″

84641A 4 × 6″ 2-Way

Woofer Size	4″ × 6″
Continuous Power Handling	30W
Music Power Handling	60W
Frequency Response	105Hz ~ 20kHz
Sensitivity	92dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-3/4″
Application	American

85741** 5 × 7″ 2-Way

Woofer Size	5 × 7″
Continuous Power Handling	40W
Music Power Handling	80W
Frequency Response	85Hz ~ 20kHz
Sensitivity	94dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	2-1/8″

82641* 6-1/2″ 2-Way

Woofer Size	6-1/2″
Continuous Power Handling	40W
Music Power Handling	80W
Frequency Response	90Hz ~ 20kHz
Sensitivity	96dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-7/8″

82541* 5-1/4″ 2-Way

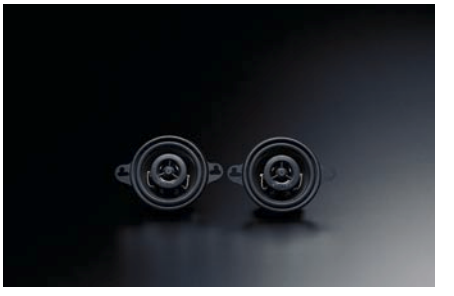
Woofer Size	5-1/4″
Continuous Power Handling	30W
Music Power Handling	60W
Frequency Response	100Hz ~ 20kHz
Sensitivity	94dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-7/8″

84641E 4 × 6″ 2-Way

Woofer Size	4 × 6″
Continuous Power Handling	30W
Music Power Handling	60W
Frequency Response	105Hz ~ 20kHz
Sensitivity	92dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-3/4″
Application	European

82441 4″ 2-Way

Woofer Size	4″
Continuous Power Handling	25W
Music Power Handling	50W
Frequency Response	105Hz ~ 20kHz
Sensitivity	94dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-5/8″



82341 3-1/2″ 2-Way

Woofer Size	3-1/2″
Continuous Power Handling	20W
Music Power Handling	40W
Frequency Response	120Hz ~ 20kHz
Sensitivity	92dB
Cone Material	Mica/Poly
Surround Material	Rubber
Voice Coil Former	Kapton
Tweeter Dome	Mylar
Tweeter Magnet Material	Neodymium
Woofer Magnet Material	Ferrite
Mounting Depth	1-3/8″

* New angled tweeter for better in-car frequency response.
** Comes with 6″ × 8″ adaptors.

Products Safety Notice

- To ensure safe operation of products, please read the owner's manuals carefully prior to use.
- ECLIPSE is not responsible for accidents and damages due to improper connections or modifications of the product in any way.

Warning

- All products are intended for operation in DC 12-Volt, negative grounded vehicles only. Never use them in 24-Volt vehicles such as heavy trucks or diesel cars with cold-region specification.
- Do not adjust the controls while driving the car. To adjust the controls, stop the car in a safe location.
- Do not follow a navigation route if they place you in an illegal, unsafe, or dangerous situation.
- Do not watch moving images on the display while driving.
  Doing so may lead to an accident resulting in serious injury or death.

Caution

- Installation of products requires experience and knowledge. Ask your ECLIPSE retailer for installation.

Others

- It may not be possible to install these products in some vehicles. In this event please consult your ECLIPSE retailer.
- It may be necessary to purchase additional connecting cables for the products.
- Due to the effects of photography and printing processes, the color of the actual product may differ somewhat from that shown here.
- CD-R/CD-RW playback quality may be affected by disc surface condition and disc format initialization process.
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ECLIPSE

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