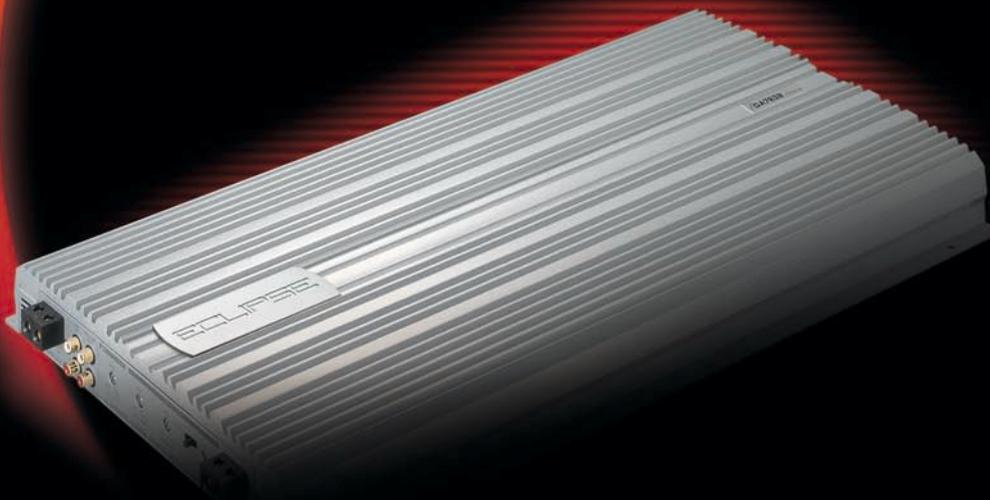


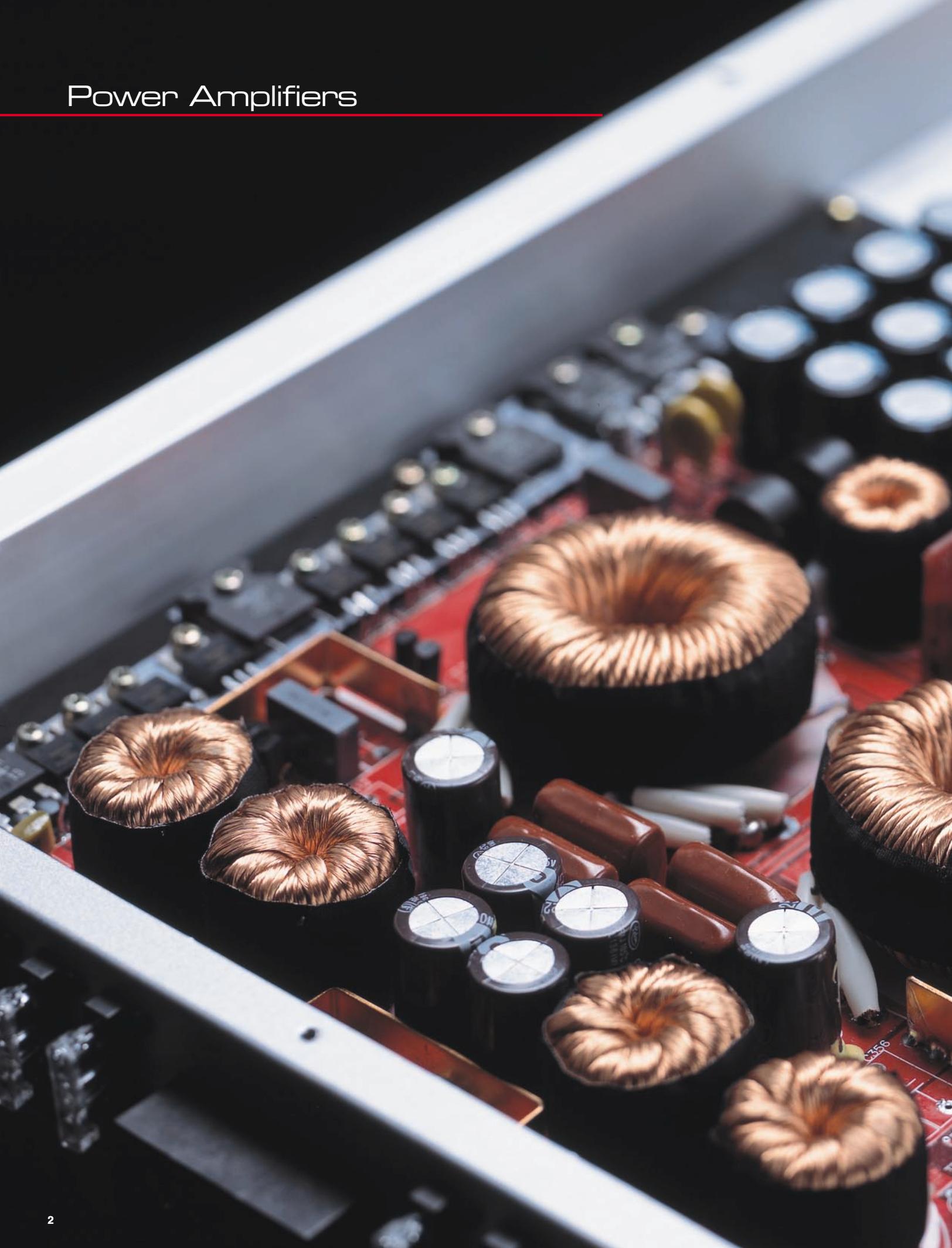
ECLIPSE

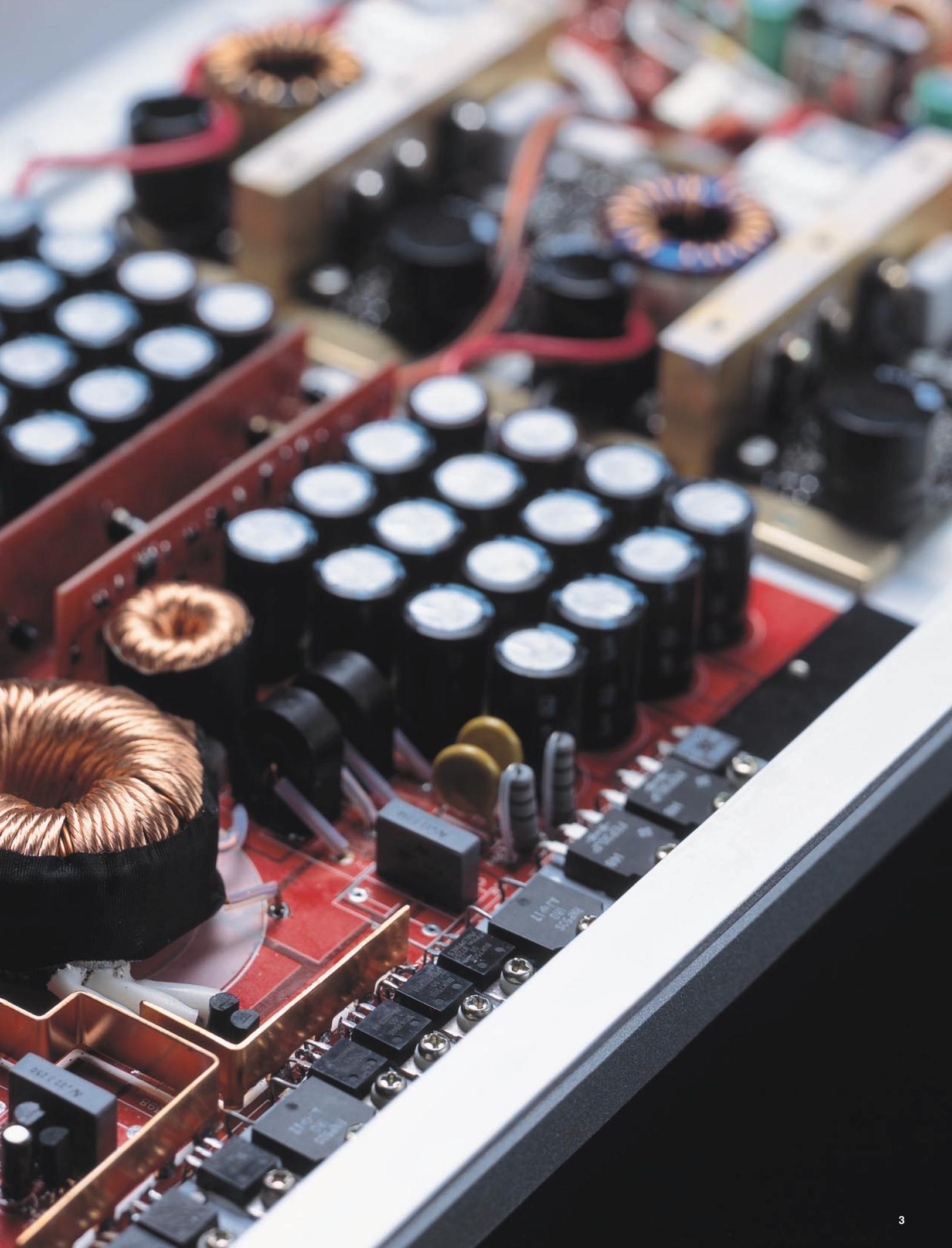
by FUJITSU TEN



Power Amplifiers

Power Amplifiers



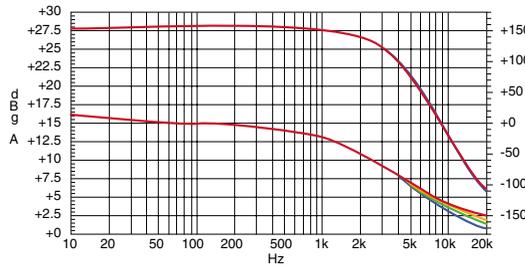


Ultra-High Power Subwoofer Amplifiers

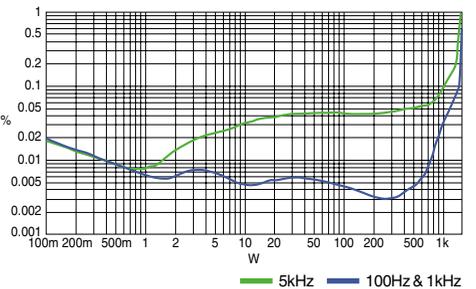


Frequency response, THD+N
ECLIPSE DA7232 ICEpower, 1000W Analog Amplifier W/Supply

Frequency response in 4Ω, 8Ω, and 16Ω and open load.

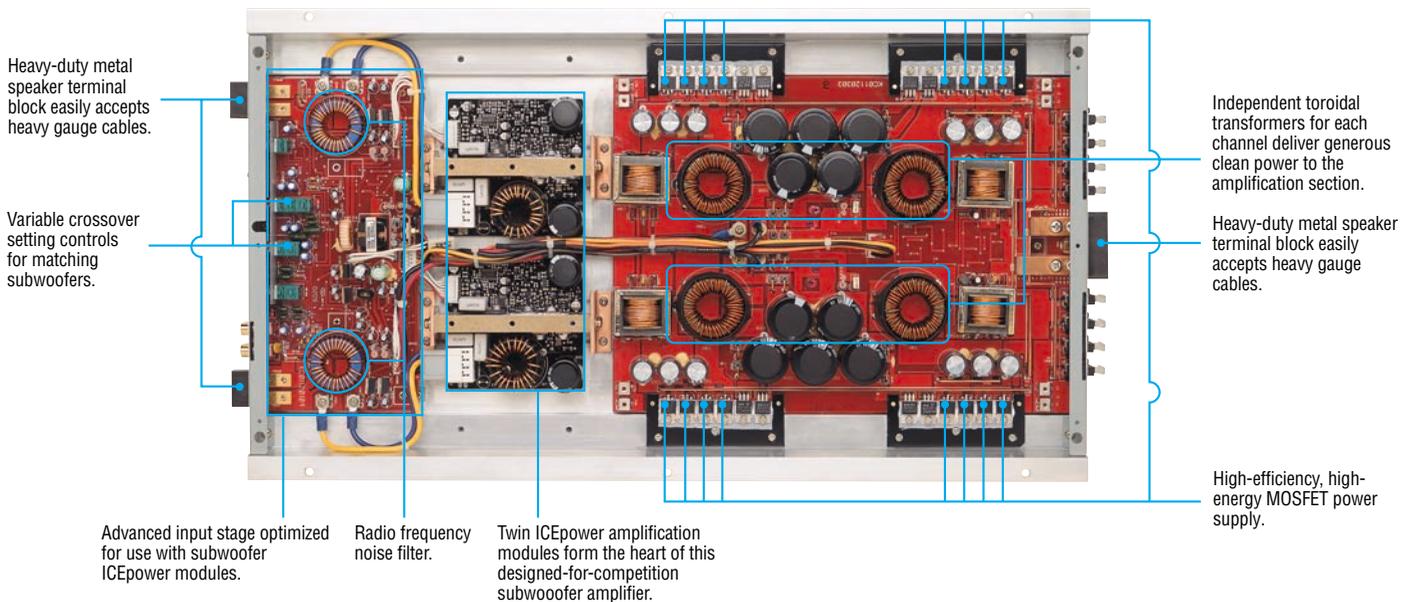


THD+N-Vs-Output power at 100Hz/1kHz/5kHz



DA7232

2 Channel Class D Subwoofer Amplifier



ECLIPSE's dedicated subwoofer amplifiers use Class D amplifier technology and topology to produce the greatest efficiency of any class of amplifier operation. The DA7232 2 channel and DA7122 1 channel Class D subwoofer amplifiers effortlessly drive any subwoofer system to produce awesome low frequencies both heard and felt. ECLIPSE combined well-known specialist audio manufacturer Bang&Olufsen's amplification modules with proprietary no-compromise audio technologies to create the ultimate subwoofer amplifiers.

Class D optimized for low frequency reproduction.

A class D or Pulse Modulation Amplifier (PMA) switching amplifier design makes use of its output devices (usually MOSFETS) to pulse on and off at very high frequencies with a continuously changing duty cycle. The result is an average output level which is then converted to an audio signal by the averaging action of the speakers. The efficiency of Class D amplifiers reaches over 90% with significantly less heat generation than conventional amplifiers, allowing smaller dimensions while generating significant power and making them inherently ideal for reproducing low frequencies. And because a dedicated subwoofer amplifier only reproduces a limited bandwidth, the DA7232 and DA7122 exploit all the advantages of Class D amplification to the maximum. ECLIPSE also uses a new and innovative Class D/PMA modulation method with higher performance than conventional Class D amplification.

Compact but extremely powerful.

With compact footprints, the DA7232 amplifier and DA7122 1 channel amplifier easily output 2000W per channel with vanishingly low total harmonic distortion and a high S/N ratio. The high efficiency of these amplifiers makes any forced cooling unnecessary, eliminating fans and heavy heat sinks even when operating continuously at high power and driving low impedance speaker loads.

Integrates seamlessly with the total system.

These amplifiers incorporate a flexible onboard crossover section with variable subsonic and low pass filters for optimally balanced and seamless sound between subwoofers and main speakers.

Quality construction throughout.

Built to the same exacting standards as other models in the Premium Amplifier Series, the DA7232 and DA7122 boast high-end amplifier circuits and construction techniques such as high-efficiency high-energy isolated power supplies, symmetrical layout, high input overload, discrete protection and audiophile-grade components. This uncommon level of attention to build and quality in dedicated subwoofer amplifiers is what optimizes these amplifiers for use in the most demanding systems.

Features

- Maximum power output of 2000W (both channels) into a 2 ohm load.
- Peak output current in excess of 50A for virtually limitless power.
- Immense 120dBA dynamic range for effortless reproduction of the lowest frequencies.
- Built-in protection against over and under-voltage conditions.
- Additional protection for amplifier and speakers as well as soft clipping and soft start-up functions.
- Balanced inputs and outputs.



Max.
2000W

DA7122

1 Channel Class D Subwoofer Amplifier

Specifications

	DA7232	DA7122
13.8V POWER SUPPLY		
Max. Power Output	2000W × 2ch	2000W × 1ch
Power Output	1Ω	Not Supported
	2Ω	2000W (2 × 1000W)
	4Ω	1000W (2 × 500W)
THD @ Rated Power	@ 1Ω	Not Supported
	@ 2Ω	0.007%
	@ 4Ω	0.005%
		0.005%
Input Voltage Neg Gnd	10.8 ~ 16V	10.8 ~ 16V
S/N Ratio	>120dB	>120dB
Freq. Response	4 ~ 3000Hz	4 ~ 3000Hz
Crosstalk	>80dB	>80dB
Slew Rate	20V μ s	20V μ s
Damping Factor	>1000	>1000
Input Sensitivity	0.2 ~ 8V	0.2 ~ 8V
Max. Current Consumption	200amps	100amps
CHANNELFLEX CROSSOVER		
Amp Crossovers	Lo-Pass 12dB/octave	50 ~ 200Hz
	Subsonic 18dB/octave	Defeat 1 ~ 60Hz
Pre-Amp Output Hi-Pass	12dB/octave	50 ~ 200Hz
Dimensions (W × H × D)	21" × 2.05" × 11.85"	15.75" × 2.05" × 11.85"

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

Premium Amplifier Series



'00 Product of the Year

Max.
1100W

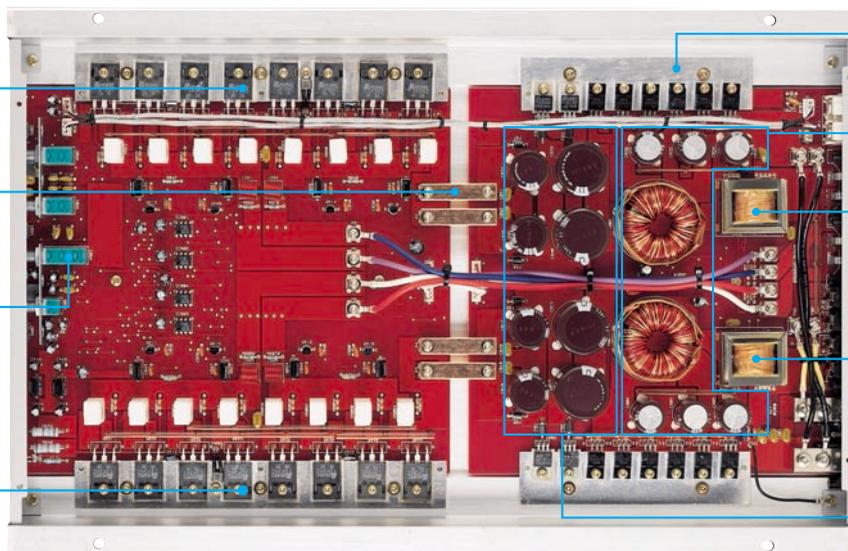
34230

2 Channel Power Amplifier with ChannelFlex Crossover plus Subsonic Filter

Oversized output transistors utilize the tried and true Darlington configuration. You get uncompromisingly accurate audio reproduction at all power levels

Heavy duty copper bus bars ensure low-impedance power transfer

Variable crossover controls let you precisely tailor the signals



High-efficiency, High-energy MOSFET Power Supply

Dual toroidal power supply transformers and filter capacitors provide noise-free power to the amplifier

Shielded and grounded chokes prevent electromagnetic and radio frequency interference from contaminating the signal

Heavy duty terminal metal blocks connected directly to the power switching circuit

Oversized secondary filter capacitors give you stronger bass

Signal amp section

Power supply section

Power, control and intensity.

The ECLIPSE Premium Amplifiers feature no current limiting and completely unregulated power supplies for a neutral, clean sound quality with virtually unlimited dynamic power on demand.

Separate power supply and signal amplifier sections.

The ECLIPSE 34230 has separate and independent amplifier power supply and signal sections. The benefit of having separate power and driver stages are greater in a car audio environment, with its significant electrical current, vibrations and various sources of distortion. The ECLIPSE 34230 has no noise interference between the power and driver stages such as switching distortion and radiated noise for sonic purity and effortless power.

Symmetrical layout.

The ECLIPSE 34230 utilizes a symmetrical component layout to achieve superior channel separation. The right and left channels are physically isolated to eliminate intermodulation and achieve excellent separation, resulting in vastly improved system imaging capability.

Massive bus bars.

The massive bus bars allow high current to flow to the PC board more efficiently and keeps unwanted heat and resistance to a minimum.

High voltage input.

ECLIPSE engineered very high input voltage capabilities into its amplifiers to take advantage of the high signal voltage output from the head unit. Able to handle input signals of up to 8 volts, these amplifiers easily cope with competition-use demands.

ChannelFlex Crossover.

There are effectively two separate and distinct crossovers with a variable subsonic filter in the 34230 and switchable slope control for the PA4212. The selectable slope allows for more precise control of bandwidth limited output power, which means more sonic accuracy in subwoofers, midbass drivers, and midrange drivers without distortion. The variable subsonic filter in the 34230 and switchable slope control for the PA4212 will make speakers last longer and sound audibly better.

Preamp outputs.

The 34230 also features crossover preamp level outputs, for adding additional amplifiers. Signal purity is maintained throughout due to common signal reference grounds and high signal voltages. It perfectly complements the simplicity of total system design using ECLIPSE amplifiers.

Intelligent 7-way discrete protection circuitry.

Seven-way protection circuitry protects the amplifiers from accidental misconnections or short circuits in the audio system. There is thermal protection (up to 90°C), DC offset, protection against excessive current on the output side, voltage output overload, excessive current in the power supply, reverse polarity power input and shorted speaker leads. A servo system monitors each of these circuits and measures them against a reference. If a condition is determined to be outside of reference tolerances, the amplifier enters a protection mode, preventing damage to the amp and audio system. The protection circuitry is never in the audio signal path, keeping the audio signal free of interference, coloration or noise.

Noise reduction with low distortion and ultralow negative feedback.

ECLIPSE amplifiers use very high-quality amp devices and the circuit makes minimal use of negative feedback for better sound. The higher-quality components in ECLIPSE amplifiers and their advanced circuits make "bandaid" fixes like too much NFB unnecessary.

High-current, high-speed output devices.

The output devices are capable of generating high current at high speed to improve both frequency response and amplifier damping.

High-efficiency, high-energy MOSFET power supply.

The ECLIPSE power supply uses current draw from the car's electrical system more efficiently to produce higher power.

Double-sided printed circuit boards.

ECLIPSE Premium Amplifiers employ 70-micron copper circuit board traces (twice the thickness of a conventional copper trace) for superior sound quality. This technology provides lower distortion and improved low frequency performance.

Audiophile-grade component selection.

High-quality components and parts designed exclusively for quality audio applications are employed for a difference that is easily heard.





Max.
1100W

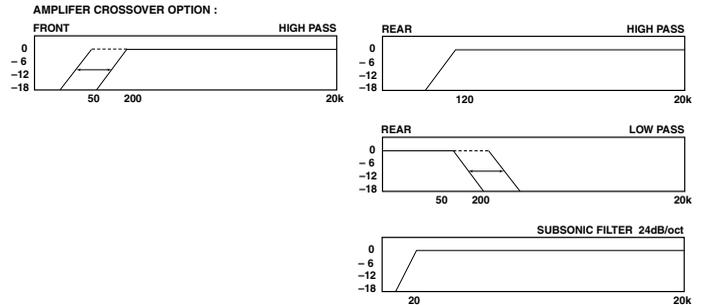
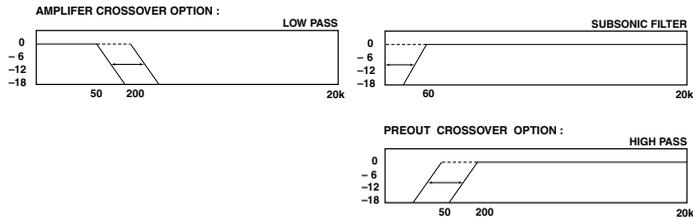
34230

**2 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter**

Max.
960W

PA5532

**5/3 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter**



Specifications

	34230	PA5532
13.8V POWER SUPPLY		
Max. Power Output	550W × 2ch (4Ω)	125W × 4ch (2Ω), 460W × 1ch (SW, 2Ω)
Power Output	2Ω	—
	4Ω	370W × 2ch
	4Ω bridged	—
THD @ Rated Power	@ 2Ω stereo	0.008%
	@ 4Ω stereo	0.004%
	@ 4Ω bridged	0.008%
Signal to Noise	105dB	105dB
Freq. Response	+0, -0.7	+0, -0.7
Crosstalk	-75dB	-75dB
Slew Rate	10V μ s	10V μ s
Damping Factor @ 60Hz	>200	>200
Input Sensitivity	0.2 ~ 8V	0.2 ~ 8V
Max. Current Consumption (4Ω)	100 amps	70 amps
CHANNELFLEX CROSSOVER		
Amp Crossover	High Pass 12dB/octave	—
	Low Pass 12dB/octave	50 ~ 200Hz
Pre-Out Crossover	High Pass 12dB/octave	50 ~ 200Hz
	Low Pass 12dB/octave	—
Subsonic Filter	Freq. Range	0-60Hz
	Slope	18dB/octave (Fix)
Dimensions (W × H × D)	18.80" × 2.05" × 11.85"	18.80" × 2.05" × 11.85"

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



Max .
800W

PA5422

4/3/2 Channel Power Amplifier
with ChannelFlex Crossover

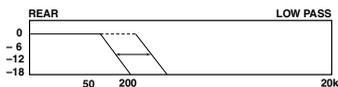
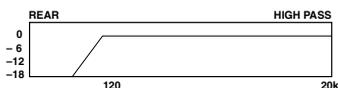
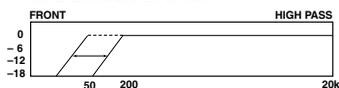
Max .
620W

PA4212

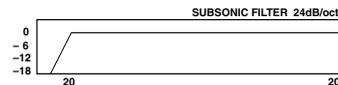
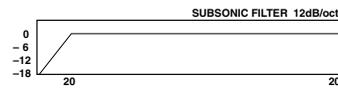
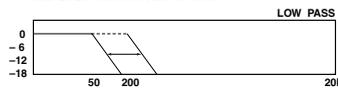
2/1 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter



AMPLIFIER CROSSOVER OPTION :



AMPLIFIER CROSSOVER OPTION :



Specifications

		PA5422	PA4212
13.8V POWER SUPPLY			
Max. Power Output		200W × 4ch (2Ω)	310W × 2ch (2Ω)
Power Output	2Ω	120W × 4ch	200W × 2ch
	4Ω	85W × 4ch	130W × 2ch
	4Ω bridged	240W × 2ch	400W × 1ch
THD @ Rated Power	@ 2Ω stereo	0.008%	0.008%
	@ 4Ω stereo	0.004%	0.004%
	@ 4Ω bridged	0.008%	0.008%
Signal to Noise		105dB	105dB
Freq. Response		+0, -0.7	+0, -0.7
Crosstalk		-75dB	-75dB
Slew Rate		10V μ s	10V μ s
Damping Factor @ 60Hz		>200	>200
Input Sensitivity		0.2 ~ 8V	0.2 ~ 8V
Max. Current Consumption (4Ω)		60 amps	50 amps
CHANNELFLEX CROSSOVER			
Amp Crossover	High Pass 12dB/octave	50 ~ 200Hz (Front) 120Hz (Rear)	—
	Low Pass 12dB/octave	50 ~ 200Hz	50 ~ 200Hz
Pre-Out Crossover	High Pass 12dB/octave	—	—
	Low Pass 12dB/octave	—	—
Subsonic Filter	Freq. Range	N/A	20Hz (Fix)
	Slope	—	12dB/octave 24dB/octave (Switchable)
Dimensions (W × H × D)		13.32" × 2.05" × 11.85"	11.32" × 2.05" × 11.85"

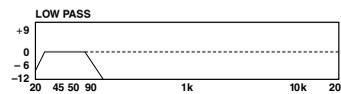
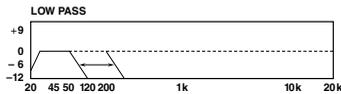
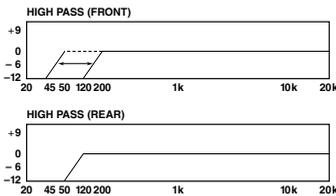
Designed, engineered and made in the U.S.A.

Integrated Amplifier Series



Max
650W
EA3532
5/4 Channel Power Amplifier
with ChannelFlex Crossover plus Subsonic Filter

Max
490W
EA3422
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 and ultra-low negative feedback

- High-current, high-speed output devices
- Audiophile-grade component selection
- Bass boost
 - EA2212: 45Hz, 9dB ON/OFF
 - EA3422: 45Hz, 0 ~ 9dB (variable) (F/R separate)
- ChannelFlex crossover
 - EA2212: Low-pass (50 ~ 200Hz) variable
 - EA3422: Low-pass (90Hz) fixed High-pass (50 ~ 200Hz) L/R independent
 - EA3532: Low-pass (50 ~ 200Hz) variable High-pass (50 ~ 200Hz) variable [front] High-pass (120Hz) fixed [rear]

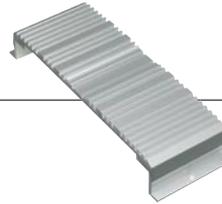
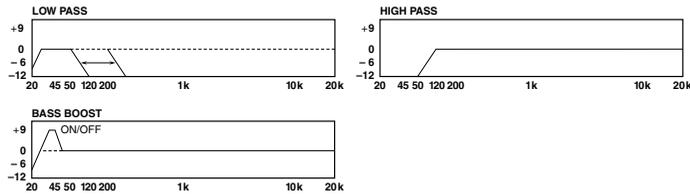
- Epoxy composite PCB
- High-level input (Add-on capability)
- Subwoofer input and output (EA3532)



Max.
210W

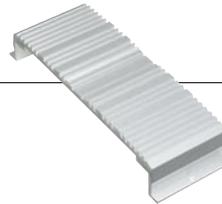
EA2212

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



BP1502

Premium Amplifier Bridge



1902

Premium Amplifier Bridge



1911

Integrated Amplifier Bridge

Specifications

	EA3532	EA3422	EA2212
13.8V POWER SUPPLY			
Max. Power Output	105W × 4ch (2Ω) 230W × 1ch (Subwoofer)	123W × 4ch (2Ω)	105W × 2ch (2Ω)
Power Output (RMS Continuous Power)	2Ω	60W × 2ch (Front), 60W × 2ch (Rear) 120W × 1ch, 4Ω (Subwoofer)	70W × 4ch
	4Ω	40W × 2ch (Front) 40W × 2ch (Rear) 120W × 1ch (Subwoofer)	50W × 4ch
	4Ω bridged	120W × 2 (Front/Rear)	140W × 2ch
THD (Rated Power)	@ 2Ω stereo	0.008%	0.008%
	@ 4Ω stereo	0.004%	0.004%
	@ 4Ω bridged	0.008%	0.008%
Signal to Noise (A-weighted 4Ω)	105dB	105dB	105dB
Frequency Response @ 4Ω stereo 20Hz ~ 20kHz	+0, -0.7	+0, -0.7	+0, -0.7
Crosstalk 4Ω	-70dB	-70dB	-70dB
Slew Rate	10V/μs	10V/μs	10V/μs
Damping Factor @ 60Hz	> 200	> 200	> 200
Input Sensitivity (pre out)	0.2 ~ 5V	0.2 ~ 5V	0.2 ~ 5V
Input Sensitivity (amp out)	0.4 ~ 10V	0.4 ~ 10V	0.4 ~ 10V
Max. Current Consumption (4Ω)	50 amps	50 amps	25 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
Bass Boost (45Hz)	—	0 ~ 9dB	ON/OFF 9dB
Subsonic Frequency Range	12dB/octave 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"

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



FUJITSU TEN LIMITED
Contact: FUJITSU TEN CORP. OF AMERICA
19600 So. Vermont Avenue, Torrance, CA 90502
Call: 800-55-ECLIPSE www.eclipse-web.com

