# CLASSE

 $\mathsf{D} \mathsf{E} \mathsf{L} \mathsf{T} \mathsf{A}^{\scriptscriptstyle{\scriptscriptstyle \top}} \quad \mathsf{S} \mathsf{E} \mathsf{R} \mathsf{I} \mathsf{E} \mathsf{S}$ 

## "There has to be something better."

These were the words of Mike Viglas in 1979, sending him on a path to the founding of Classé Audio.

Mike was passionate about many things, especially music. He loved showing off his latest Hi-Fi system at parties. Then, the inevitable happened. BOOM! Lights flickered, and silence. As the guests pulled capacitor wadding from their hair, Mike, embarrassed, vowed that it would not happen again. There had to be a better way.

How to get both performance and reliability from highend audio gear? This was top of mind when Mike met David Reich, a talented young engineer building his own solid-state amplifiers. Mike was instantly taken with the sound of David's amp and together they set out to realize that vow. Classé was founded.



Forty years on, Classé remains at the forefront of audio. The iconoclastic and talented Classé Design team in Montréal now has a global reach, being larger and more diverse than ever. Precision manufacturing at the legendary Shirakawa Audio Works in Northern Japan allows today's Classé to deliver on the performance and reliability always demanded by Mike Viglas.

We are passionate about our mission and think Mike would be proud of what we have achieved.





THE NEW DELTA<sup>™</sup> SERIES



## CLASSE START LISTENING

Try. Evaluate. Improve. Always be open to something new.

Relentlessly attack anything that could compromise the purest possible signal path. Strip away all unnecessary complexity. Eliminate everything in the way of the shortest, cleanest path possible.

We use class A circuitry, the purest form of amplification. Circuit boards are hand-laid, using six independent layers to optimally isolate signals, power and ground planes.

We selected only the highest quality parts, and customized others, with a singular focus on performance. Testing, certifications and documentation help ensure every unit is built consistently and to the highest standards.

Whether your goal is five minutes alone with music at day's end to unwind, or pure sonic fidelity and reliability for a professional studio application, the Classé Delta series exists for you. It is the very definition of something better.

Creating something better takes work. It does not happen by accident. After years of continuous development, the Delta series is ready for audition.



## DELTA PRE PRE AMPLIFIER

The Delta<sup>™</sup> PRE is a powerful and comprehensive control center that helps you get the most from every source and each recording in any room.

**Every source**, from Phono to Network, finds a short, direct signal path through this preamp/DAC. Analog and digital sources alike are rendered in exquisite detail, with vivid tonal colors and lifelike dynamics. Features including 0.25dB precision volume steps, bypass and pass-thru modes, and key processing tools to maximize enjoyment of every listening experience.

**Digital processing features** include fully customizable tone controls, bass management supporting stereo subwoofers, and five-band parametric EQ for all channels. Tone control corrects for small imbalances common in recordings. It may be used as a conventional bass and treble control or in Tilt mode, where the tonal balance can be subtly tilted toward high or low frequencies.

**Get smooth and extended bass** response in almost any room by adding one or two subwoofers to help fill bass dips and by using the PEQ to tame bass peaks.





# DELTA MONO POWER AMPLIFIER

**Class A** is widely recognized as the purest form of amplification, where both sides of the amp track the entire signal, thereby eliminating the crossover distortion inherent in class B and A/B designs. Delta<sup>T</sup> series amplifiers capitalize on class A throughout the critical range of power delivery. The Delta MONO delivers 35W in class A and 300W overall. For low-impedance loads, the amplifier will develop over 1,000W @ 2 $\Omega$ . The Delta STEREO, built to the same standard, delivers 12.5W/Ch in class A (250W/Ch overall) and develops over 350W/Ch @ 2 $\Omega$ .

**ICTunnel**<sup>™</sup>, pronounced "Icy Tunnel" and short for Intelligent Cooling Tunnel, is an active cooling solution used in Delta series amplifiers. It expertly manages heat and maintains ideal operating temperatures to keep sound consistent and stable no matter how hard the amplifiers are driven.

**Lateral MOSFET transistors** were selected for the critical output stage for ultimate performance. They also are inherently more stable than bipolar transistors used in 90% of high-end amplifiers, substantially augmenting sonic reliability. These amplifiers faithfully render the source while getting the most from your speakers of choice.





CLASSE







#### OVERALL DIMENSIONS

Width 44.4 cm x Depth 44.9 cm x Height 12.1 cm

WEIGHT

Gross Weight 18.7 kg Net Weight 13.5 kg

#### GENERAL

Gain Range	-93 dB to +14 dB
Channel Matching	+/- 0.03 dB
Input Impedance (at 1 kHz, BAL / SE)	50 kΩ
Output Impedance BAL / SE	200 Ω / 50 Ω
Maximum Output Level BAL / SE	18 Vrms / 9 Vrms

BYPASS MODE (Analog inputs, Tone / EQ / Subwoofers disabled)

1 Hz – 2 MHz

50pF, 100pF, 150pF, 200pF,

250pF, 300pF, 350pF,

400pF, 450pF

Frequency Response (-3 dB, 50 Ω source impedance)

<0.0004 % at 1 kHz Harmonic Distortion (measurement bandwidth: 90 kHz) <0.0005 % at 10 kHz <0.0006 % at 20 kHz

<0.001 % Intermodulation Distortion (measurement bandwidth: 90 kHz)

Maximum Input Level BAL / SE	9 Vrms (+21.3 dBu)
(at 0 dB gain)	4 5 Vrms (+15 3 dB

Signal-to-Noise Ratio (A wtd) 130 dB (133 dBA) (22 kHz BW, ref 9 Vrms)

-143 dB (100 Hz), -140 dB Crosstalk (one channel undriven) (BAL / SE) (1 kHz), -124 dB (10 kHz)

#### PHONO SECTION

(0	dB	gain,	Bypass	Mode,	XLR2	in,	Main	XLR	out)	

RIAA Deviation (20 Hz-20 kHz) < 0.2 dB

Selectable Load for MM Type (47k II)

#### Selectable Load for $7.5\Omega$ , $10\Omega$ , $33\Omega$ , $50\Omega$ , $82\Omega$ , **MC – Low Output** 100Ω, 330Ω, 1kΩ

Load for MC – High  $47k\Omega$ Output

MM, MC - HIGH OUTPUT

Gain (1kHz, 20Ω 41.5dB source impedance)

SNR (22kHz BW, ref 86dB (93dB A-wtd) 5mVrms in)

11dB (20Hz), 23dB (1kHz), Max Input Level (overload ref 5mVrms) 34dB (10kHz)

MC – LOW OUTPUT

Gain (1kHz, 20Ω source 60dB impedance,  $1k\Omega$  load)

68dB (74dB A-wtd) SNR (20Hz-20kHz)

Max Input Level 12dB (20Hz), 31dB (1kHz), (overload ref 0.5mVrms, 1kΩ load) 52dB (10kHz)

HEADPHONES

Power (nominal input, 540mW/Ch 0dB gain, 32Ω load)

**Output Impedance** 6.8Ω

Ethernet

SPDIF

FILE FORMATS & SAMPLE RATES SUPPORTED USB-F 44.1k, 48k, 88.2k, 96k (iOS specific) USB-B 32k, 44.1k, 48k, 88.2k, 96k, 176.4k, 192k. 352.8k. 384k

DSD64, DSD128, DSD256 (native requires Thesycon/Classe driver for Windows) DSD64, (DoP) WAV, AIFF, ALAC, FLAC, WMA, AAC, MP3, OGG\_VORBIS (max 192k/24b) DSD64, (DoP)

PCM 32k, 44.1k, 48k, 88.2k, 96k,

SE / RCA	2 pairs
Phono RCA	1 pair
DIGITAL IN	
HDMI	4* (HDMI 2.0b w/HDCP 2.2)
USB-F	
USB-B	
SPDIF Coaxial	
SPDIF Optical	
SPDIF AES / EBU	
Ethernet	
OUTPUTS	
HDMI	1* (HDMI 2.0b w/HDCP 2.2)
BAL / XLR	5 (configurable: 2pairs+1sub 1pair+1sub pair,)
SE / RCA	5 (configurable: 2pairs+1sub 1pair+1sub pair,)
AUTOMATION	
DC Triggers In / Out	2 sets
CAN Bus	1 set in / out
RS-232 over RJ-45	

**INPUT / OUTPUT COMPLEMENT** 

2 pairs (XLR2 can be assigned

s+1sub.

s+1sub.

as BAL phono in)

ANALOG IN

BAL / XLR



### DELTA<sup>®</sup> Mono POWER AMPLIFIER

#### OVERALL DIMENSIONS

Width 44.4 cm x Depth 49.2 cm x Height 22.2 cm

WEIGHT

Gross Weight 50.6 kg Net Weight 44.3 kg

Frequency Response (-3 dB, 50 Ω source impedance)

Continuous Output Power (at 1 kHz, 0.1% THD+N)

35 W @ 8  $\Omega$  delivered in pure class A operation 300 W @ 8 Ω 600 W @ 4 Ω 1000 W @ 2 Ω (with AC line held constant)

Harmonic Distortion (measurement bandy 500 kHz, 25 Vrms in 4 Ω or 8 Ω)

Harmonic Distortion (measurement bandwidth: 90 kHz, 25 Vrms in 4 Ω or 8 Ω)

Peak Output Voltage

Input Impedance (at 1 kHz, BAL / SE)

Voltage Gain (at 1 kHz, BAL / SE)

Intermodulation Distortion (SMPTE 4:1) (8 Ω or 4 Ω, BAL / SE)

Intermodulation Distortion (CCIF) (8Ω or 4Ω, BAL / SE)

Signal-to-Noise Ratio (A wtd in parenthesis) (22 kHz BW)

Slew Rate

Output Impedance

< 0.0016 % at 1 kHz <0.0018 % at 10 kHz <0.0028 % at 20 kHz < 0.0005 % at 1 kHz <0.0006 % at 10 kHz <0.0015 % at 20 kHz

148 Vp-p into 8 Ω 156 Vp-p no load

29 dB

< 0.001 %

<0.002 %

82 kΩ

117 dB (119.5 dBA)

72 V / µs

0.01 Ω (100 Hz), 0.011 Ω (1 kHz),

Damping Factor (at 1 kHz, ref 8Ω)

All tests performed un-weighted using BAL input and 500kHz measurement bandwidth (except when specified otherwise). Delta STEREO measurements made with both channels driven.

Specifications subject to change without notice

(opt, coax, AES / EBU) 176.4k, 192k / DSD64

DELT power am	A <sup>™</sup> <u>Stereo</u> Plifier	DS
OVERALL DIMENSIONS		
wrath 44.4 cm x Depth 49.2	cm x Height 22.2 cm	
Gross Weight 52.8 kg Net W	<b>eight</b> 46.4 kg	$\propto$
Frequency Response (-3 dB, 5 0Ω source impedance)	1 Hz – 650 kHz	S
Continuous Output Power (at 1 kHz, 0.1 % THD+N)	35 W/Ch @ 8 $\Omega$ delivered in pure class A operation 250 W/Ch @ 8 $\Omega$ 500 W/Ch @ 4 $\Omega$ (with AC line held constant)	ED
Harmonic Distortion (measurement bandwidth: 500 kHz, 20 Vrms in 4 $\Omega$ or 8 $\Omega$ )	350 W/Ch @ 2 Ω (with AC line held constant) <0.0016 % at 1 kHz <0.002 % at 10 kHz <0.003 % at 20 kHz	Б Р
Harmonic Distortion (measurement bandwidth: 90 kHz, 20 Vrms in 4 Ω or 8 Ω)	<0.0007 % at 1 kHz <0.001 % at 10 kHz <0.0025 % at 20 kHz	S
Peak Output Voltage (nominal AC line)	129 Vp-p into 8 Ω 138 Vp-p no load	
Input Impedance (at 1 kHz, BAL / SE)	82 kΩ	S S
Voltage Gain (at 1 kHz, BAL / SE)	29 dB	) Е
Intermodulation Distortion (SMPTE 4:1) (8 Ω or 4 Ω, BAL / SE)	<0.0018 %	Ъ
Intermodulation Distortion (CCIF) (8 $\Omega$ or 4 $\Omega$ , BAL / SE)	<0.004 %	S
Signal-to-Noise Ratio (A wtd in parenthesis) (22 kHz BW)	118 dB (120 dBA)	
Crosstalk (one channel driven to 250 W / 8Ω)	124 dB (100 Hz), 107 dB (1 kHz), 90 dB (10 kHz)	SĒ
Slew Rate	75 V / μs	AS
Output Impedance	0.009 Ω (100 Hz), 0.009 Ω (1 kHz), 0.012 Ω (10 kHz)	CL
Damping Factor (at 1 kHz, ref 8 Ω)	850	

All tests performed un-weighted using BAL input and 500kHz measurement bandwidth (except when specified otherwise). Delta STEREO measurements made with both channels driven.

## CLASSE

Sound United

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