

# CA Series Power Amplifiers.

Our most  
efficient amp  
series yet!  
D-MAX Class D  
technology,  
Dynamic Power  
Factor Correction,  
and SailFlow  
cooling.

**D**-MAX Class D technology and Dynamic Power Factor Correction make our CA series the most efficient amplifiers we (or anyone else) have offered – 25% more efficient than one of our most popular competitors.

Efficiency definitely counts when the electrical power bill comes. But our CA Series have *another* advantage over other amps of the same power: you can run any **TWO** CA's on a **single** 20-amp line. If your project needs two amps, you don't have to call a \$100/hr electrician to add a second 20-amp feed.

CA amps sound superb even when driven hard and stay cooler than most, thanks to straight-thru, unimpeded SailFlow cooling.



CA-502  
CA-1.02  
CA-1.52  
front  
panel



CA-502  
CA-1.02  
CA-1.52  
back  
panel



CA-504  
CA-1.04  
CA-1.54  
front  
panel



CA-504  
CA-1.04  
CA-1.54  
back  
panel



**DATA  
SHEET**  
on  
**PAGE THREE**

**This page  
intentionally  
left blank\*.**

**Data Sheet  
begins on the  
next page.**

\*Done so that those fortunate to have printers with 2-sided printing capabilities can print out the Data Sheet on one sheet of paper.

# CA Series

## High-Efficiency Power Amplifiers

Ashly's proprietary D-MAX™ technology takes Class D performance and efficiency to a whole new level. By starting with a clean slate, our engineers were able to apply cutting-edge design practices and state-of-the-art components to the most efficient amp we've tested thus far.

The pay-off is less heat, lower distortion, more stable operation and greater reliability. Bulky heat sinks are no longer required. Instead, we optimized active air cooling using our newly developed SailFlow™ design, which moves the air along a selective path, to where it's needed most.

Coupled with our ultra-high-speed switching power-supply and intelligent power management, all the transient impact and spatial detail of your sound is preserved and your speakers will never be happier.

Light-weight and power-efficient, CA will never pull more power than your wall outlet delivers. No more worry about driving speakers to the brink of destruction or tripping breakers.

- 2 and 4-channel models
- 500 to 1500W @4Ω
- Stable 2Ω rating
- 70/100V capability
- Ultra efficient D-MAX Class D design
- DPFC (Dynamic Power Factor Correction)
- Selectable amp gain per channel
- Adjustable front panel Input Gain per channel with lock-out
- Bi-lateral SailFlow cooling



CA-502  
CA-1.02  
CA-1.52  
front panel



CA-502  
CA-1.02  
CA-1.52  
back panel



CA-504  
CA-1.04  
CA-1.54  
front panel



CA-504  
CA-1.04  
CA-1.54  
back panel

CA Series Model	Chs	2Ω	4Ω 8Ω	8Ω bridged	Constant Voltage
 CA-502	2	500W	500W 250W	1000W	1000W bridged 70V
 CA-1.02	2	1000W	1000W 500W	2000W	1000W 70V 2000W 100V bridged
 CA-1.52	2	1500W	1500W 750W	3000W	1500W 70V 3000W 100V bridged
 CA-504	4	500W	500W 250W	1000W	1000W bridged 70V
 CA-1.04	4	1000W	1000W 500W	2000W	1000W 70V 2000W 100V bridged
 CA-1.54	4	1500W	1500W 750W	3000W	1500W 70V 3000W 100V bridged

- Installer-friendly Euroblock and XLR combo connectors
- Switchable HPF and Clip Limiter per channel
- CV remote ports per channel
- Solid metal front panel
- 5-year Warranty

US toll-free +1.585.872.0010  
 Fax +1.585.872.0739  
 Sales@Ashly.com • [www.Ashly.com](http://www.Ashly.com)



### General Power Amplifier Specifications (0dBu = 0.775V rms)

Amplifier Model	CA1.54	CA1.52	CA1.04	CA1.02	CA504	CA502
<b>Maximum Output Power</b> - in Watts						
<i>CEA-2006/490A, 20ms 1kHz 1%THD+N, 480ms 1kHz -20dB, 120VAC, all channels driven at rated load</i>						
<b>Low Z output, per channel</b>						
2 Ohm	1500	1500	1000	1000	500	500
4 Ohm	1500	1500	1000	1000	500	500
8 Ohm	750	750	500	500	250	250
<b>Low Z output, per bridged channel pair*</b>						
4 Ohm	3000*	3000*	2000*	2000*	1000*	1000*
8 Ohm	1500*	1500*	1000*	1000*	500	500
<b>70V/100V* output</b>						
70V	1500 (direct)	1500 (direct)	1000 (direct)	1000 (direct)	1000* (bridged)	1000* (bridged)
100V	3000* (bridged)	3000* (bridged)	2000* (bridged)	2000* (bridged)	1000* (bridged)	1000* (bridged)
*May require Class 3 speaker wiring, all others use Class 2 wiring. See section 2.3						
<b>Total Power Draw</b> - in Watts, all channels driven, 1/8 power sinewave						
Standby	22	13	19	10	17	8
Idle (no signal)	100	31	70	40	34	17
1/8 max power	975	485	675	335	345	172
<b>Total Current Draw</b> - in Amps, all channels driven, 1/8 power sinewave, 120VAC (divide by 2 for 240VAC)						
Standby mode	0.39	0.24	0.37	0.21	0.35	0.2
Idle (no signal)	0.68	0.36	0.64	0.34	0.5	0.27
1/8 max power	8.9	4.2	6	3	3	1.5
<b>Total Thermal Dissipation</b> - in BTU/hour with typical input, all channels driven, 120VAC						
Standby mode	76	44	65	32	57	28
Idle (no signal)	209	105	184	96	115	57
1/8 max power, 4 Ohm	648	314	474	229	266	120
1/8 max power, 2 Ohm	754	355	576	269	304	148
<b>Input Sensitivity</b> - in Volts and dBu, per back panel DIP Switch gain settings						
@26dB gain	2.0V (+8.2dBu)	2.0V (+8.2dBu)	2.7V (+11dBu)	2.7V (+11dBu)	3.9V (+14dBu)	3.9V (+14dBu)
@32dB gain	1.0V (+2.2dBu)	1.0V (+2.2dBu)	1.4V (+5.1dBu)	1.4V (+5.1dBu)	1.9V (+7.8dBu)	1.9V (+7.8dBu)
@38dB gain	0.5V (+3.8dBu)	0.5V (+3.8dBu)	0.68V (-1.1dBu)	0.68V (-1.1dBu)	0.97V (+2dBu)	0.97V (+2dBu)
@1.4V gain	1.4V (+5.1dBu)	1.4V (+5.1dBu)	1.4V (+5.1dBu)	1.4V (+5.1dBu)	1.4V (+5.1dBu)	1.4V (+5.1dBu)

Electronic	
Distortion (SMPTE, typical)	<0.5%
Distortion (THD-N, typical, 8 Ohm, 10dB below rated power, 20Hz-20kHz)	<0.5%
Signal to Noise, 26dB input sensitivity, 20Hz-20kHz, unweighted	>98dB (50x models) >101dB (1.0x models) >103dB (1.5x models)
Frequency Response	20Hz-20kHz, ±0.05dB
Channel Separation (dB from full output, 1kHz)	-75dB
Damping Factor (8 Ohm load, <1kHz)	>250
Balanced Input Connector (per channel)	Euroblock (3.5mm), ¼" TRS and XLR Combo jack
Input Impedance	10k Ohm
Maximum Input Level	+21dBu

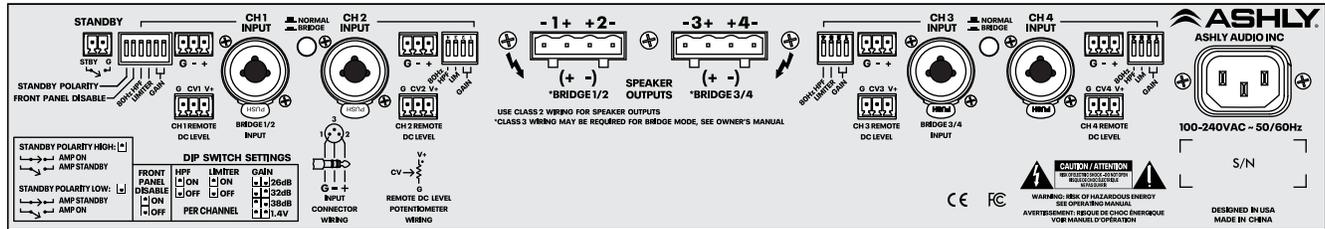
Bridge Mode Switch (per channel pair)	In for bridged mode, Out for stereo
Remote DC Level Control (G, CV, V+ per channel)	Euroblock (3.5mm), V+ is fully on, G is fully attenuated
DIP Switch settings (per channel)	
Switches 1-2: Input Gain	26dB, 32dB, 38dB, 1.4V
Switch 3: Output Clip Limiter	On, Off
Switch 4: Input High Pass Filter	80Hz 2nd order HPF, On, Off
DIP Switch settings (global)	
Switch 5: Front Panel Disable	On, Off
Switch 6: Standby Polarity	High (standby when open), Low (standby when closed)
Standby Contact Closure	Euroblock (3.5mm)
Speaker Output Connector	Euroblock (7.62mm)

Front Panel Indicators	
Power Switch LED (white)	On, Off, Standby (flashing)
Clip/Mute LED (red)	On at 95% max output (0.5dB below max), Mute
Signal LED (green)	On at 25% max output (12dB below max)
Current LED (green)	On at >2 Amps to speaker load
Temp LED (yellow)	On when thermal counter-measures are being applied
Bridge LED (green)	Per Channel Pair - On, Off
Protect LED (red) see troubleshooting section for protect LED error codes	On for fault condition counter-measures or shut-down, Off
Disable LED (yellow)	On when front panel controls are disabled, Off

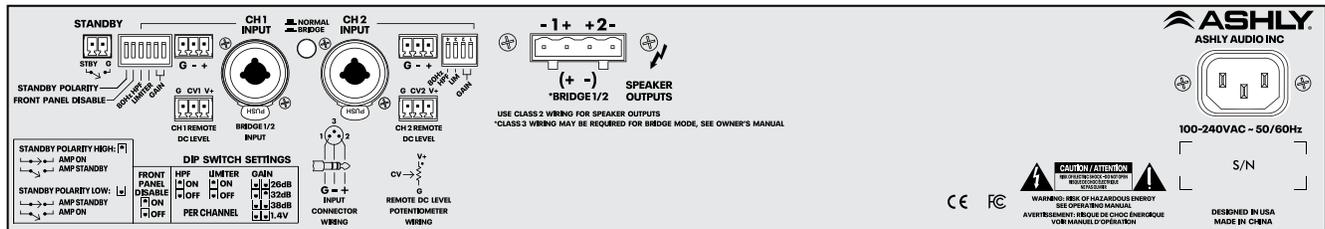
Controls	
Attenuators	Per channel: front panel, Fully off = Mute
Remote Control Options	WR-1, WR-1.1 DC level control
Protection and Cooling	
Amplifier Protection	In-rush current, over-temperature, output DC, output over-power, AC mains voltage, mains fuses
Cooling	Continuously variable temperature controlled fan(s)

Physical	
Power Cable Connector	20A IEC
Operating Voltage Range (50-60Hz, 85VAC or 170VAC min startup)	70-135VAC @110-120VAC, 140-270VAC @220-240VAC
Environmental	32°F-120°F, (0°C-49°C) non-condensing
Unit Dimensions (all models)	19"W x 3.5"H x 16.1"D (483 x 89 x 409mm)
Unit Weight by Model	CA-502: 15lbs (6.81kg) CA-504: 17.5lbs (7.95kg) CA-1.02: 15.5lbs (7.04kg) CA-1.04: 19.5lbs (8.85kg) CA-1.52: 16lbs (7.26kg) CA-1.54: 20lbs (9.08kg)

Physical (continued)	
Shipping Dimensions (all models)	21.9"W x 5.43"H x 19.3"D (556mm x 13.8mm x 489mm)
Shipping Weight by Model	CA-502: 18.5lbs (8.4kg) CA-504: 21.5lbs (9.76kg) CA-1.02: 19.5lbs (8.85kg) CA-1.04: 24.0lbs (10.9kg) CA-1.52: 20.0lbs (9.08kg) CA-1.54: 24lbs (10.9kg)
Safety/Compliance	cTUVus, CE, FCC Class B, RoHS



CA-504 / CA-1.04 / CA-1.54 back panel



CA-502 / CA-1.02 / CA-1.52 back panel

**CA SERIES ARCHITECT & ENGINEERING SPECIFICATIONS**

in .txt and MS Word .docx format are available in the **DOWNLOADS** section of <http://ashly.com/ca-series-amplifiers/>

**USER MANUAL**

SCAN ME

Or download the complete User Manual at [http://ashly.com/wp-content/uploads/2019/09/CA\\_Manual.pdf](http://ashly.com/wp-content/uploads/2019/09/CA_Manual.pdf)

**CA SERIES 2D AUTOCAD FILES**

are available in the **DOWNLOADS** section of <http://ashly.com/ca-series-amplifiers/>

Ashly Audio, Inc. • 847 Holt Road • Webster, NY  
USA • US toll-free +1.585.872.0010  
Fax +1.585.872.0739 • Sales@Ashly.com



[www.ashly.com](http://www.ashly.com)

© 2020 Ashly Audio, Inc, All Rights Reserved. Ashly is a registered trademark of Ashly Audio, Inc. All other trademarks are the property of their respective holders. V320A

All Specifications are subject to change.