



CAMCO Vortex & Tecton Series power amplifiers



In 1999 Camco introduced to the market the Vortex series power amplifier. Vortex was a next-generation range of amplifiers setting new standards in hi-power, lightweight, robust design and advanced technology for the professional user. The Vortex series made use of the advanced Camco Switch Mode Power Supply Technology, along with a host of other advanced features, and quickly became a byword for the hi-end pro-audio user and highly regarded in the industry.

Once Vortex had been in the market for some time Camco began receiving feed back indicating that Vortex was loved by all but some sections of the "market" were demanding the Vortex technology in a more cost-effective package. Armed with these user comments Camco went to work developing the Tecton series of amplifier. Developed using the same technology footprint from the Vortex series with a number of focused changes, and allowing the product range to be dedicated to as broad a market area as possible—whilst offering focused usage, the Camco Tecton Series has achieved this by "optimising" the Vortex amplifier's performance.

The Tecton series of amplifiers is optimised for either 2Ω or 4Ω loads, from 400 Watts up to 1900 Watts per channel. As a result a user can select from a range of six amplifiers models, utilising the best model to fit the dedicated application's requirements. If one was to compare the Tecton and Vortex Series' of amplifier to assess which is suitable for a given application, then for fixed installations or live sound applications, where a fixed power format is required, the Tecton series delivers just that.

Essentially Tecton is aimed at fixed installation, contractor, theatre applications, and live sound situations where fixed power and load format is suitable. Conversely, where a situation demands higher power levels and a flexibility of load is required (say 8 Ohms down to even as low as 1 Ohm with power capability up to 3000Kw per channel at 40hm), one would use the Vortex series. In effect, the combination of the Tecton and Vortex series allows all professional users to take advantage of products dedicated to the reproduction of fine natural sound.

VORTEX SERIES power amplifiers

Pure Sonic Performance: Total precision and transparency is the trademark of the Vortex series, thanks to its careful design eliminating sound-deteriorating drawbacks right from the start. This is also evident in the Vortex Series exceptional low distortion values and excellent signal to noise ratio.

Flexible in Power & Application: The Vortex amplifier can easily switch between applications and speaker setups due to its unique power regime. This consist of an extensive power reservoir, stability down to 1 Ohm loads and the ability to run in Stereo, Bridge Mono and Parallel Mono operation modes.

Designed for Touring & More: With a weight of just 12.5Kg and designed for the demands of touring professionals the 2RU chassis ensures exceptional reliability. All dynamic protection circuits are the result of the philosophy, "Audio-at-all times".

Remote Control Included: The Vortex Series remote control system allows complete application freedom, from FOH to control room centre, the ability to control and monitor usage comes as a standard feature.

Optional Controller Module & Audio Network: All Vortex amplifiers can be upgraded with CAMCO's advanced controller-modules, converting the Vortex into a complete loudspeaker management system. Network solutions via EtherSound or CobraNet offer stand alone Network option modules or combined DSP and Network modules.

6 Years Warranty: CAMCO amplifiers renowned reliability is backed up by 6 years warranty from date of first purchase.



The entire signal path in the Vortex amp is microprocessor controlled, even the gain setting is digital controlled. This ensures minimal interference in the signal at transparent audio performance.



The built-in CAMCO Audio Interface (CAI) on the Vortex series allows real time and dynamic monitoring and control of the amplifier. As the Vortex amp is microprocessor controlled it can remotely be set in true standby mode, where the main power supply is shut down but the signal and control section is still running.



The ability to run in Parallel Mono is a unique CAMCO feature, which extends the amplifier's ability to run at extremely low impedances.



CAMCO VORTEX SERIES

VORTEX amplifiers

Precision, pure natural sonic performance and total power define the Vortex series. The difference; total care about audio design and integrity.

Camco Vortex comes with five different models for a wide variety of professional applications..

VORTEX 2.6

Output Power (*)

- 16 : 250-watt
- 8 : 480-watt
- 4 : 860-watt
- 2 : 1400-watt
- peak: 1540-watt

- 16 mono (**): 960-watt
- 8 (**): 1720-watt
- 4 (*): 2800-watt
- 2 (†): 1720-watt
- 1 (†): 2800-watt
- peak mono: 3080-watt

Output Voltage

- peak @ 8 : 90-V
- peak, no load: 96-V

- net weight: 11.7 Kg
- shipping weight: 14 Kg

VORTEX 4

Output Power (*)

- 16 : 500-watt
- 8 : 930-watt
- 4 : 1570-watt
- 2 : 2300-watt
- peak: 2490-watt

- 16 mono (**): 1860-watt
- 8 (**): 3140-watt
- 4 (*): 4600-watt
- 2 (†): 3140-watt
- 1 (†): 4600-watt
- peak mono: 4980-watt

Output Voltage

- peak @ 8 : 130-V
- peak, no load: 138-V

- net weight: 11.7 Kg
- shipping weight: 14 Kg

VORTEX 6

Output Power (*)

- 16 : 730-watt
- 8 : 1350-watt
- 4 : 2300-watt
- 2 : 3300-watt
- peak: 4090-watt

- 16 mono (**): 2700-watt
- 8 (**): 4600-watt
- 4 (*): 6600-watt
- 2 (†): 4600-watt
- 1 (†): 6600-watt
- peak mono: 8180-watt

Output Voltage

- peak @ 8 : 150-V
- peak, no load: 162-V

- net weight: 12 Kg
- shipping weight: 14.3 Kg



VORTEX 200V

Output Power (*)

- 16 : 1040-watt
- 8 : 1880-watt
- 4 : 3100-watt
- 2 : 2600-watt
- peak: 4050-watt

- 16 mono (**): 3760-watt
- 8 (**): 6200-watt
- 4 (*): 5200-watt
- 2 (†): 6200-watt
- 1 (†): 5200-watt
- peak mono: 8100-watt

Output Voltage

- peak @ 8 : 180-V
- peak, no load: 162-V

- net weight: 12.2 Kg
- shipping weight: 14.5 Kg

VORTEX 3QUADRO

Output Power (*)

- 16 : 270-watt
- 8 : 490-watt
- 4 : 800-watt
- 2 : 720-watt
- peak: 1070-watt

- 16 mono (**): 980-watt
- 8 (**): 1600-watt
- 4 (*): 1480-watt
- 2 (†): 1600-watt
- 1 (†): 1480-watt
- peak mono: 2140-watt

Output Voltage

- peak @ 8 : 90-V
- peak, no load: 101-V

- net weight: 10.8 Kg
- shipping weight: 13.1 Kg

specifications

- **Circuitry:** Bipolar, Class H
- **Frequency Response:** 20 Hz - 20 kHz \pm 0,15 dB 8 load, 1 dB below rated power
- **Input Impedance:** 40 k balanced
- **Voltage Gain:** selectable: 26 dB, 32 dB, or 1,4 V input sensitivity
- **Protection Circuits:** Inrush-current limitation, protection circuits against power on/off transients, temperature monitoring of transformers and heat-sinks, output DC protection,

- power transistor control, temperature dependent SOA protection, intelligent mains fuse protection
- **Limiters:** Switchable peak-limiter
- **Fan:** Two temperature dependent speed-controlled axial fans
- **Ground-Lift:** Input ground-lift switch on back panel
- **Indicators:** LEDs for ON, SIGNAL, CLIP, DC, High Temp, Output Current
- **Input Connectors:** Three-Pin XLR, male and female per channel, pin 2 = inphase

- **Output Connectors:** (†††) One 4-pole SPEAKON connector for each output channel (bi-amping possible)
- **Modes of Operation:** STEREO, BRIDGE MONO and PARALLEL-MONO
- **Options:** Extended User Interface / E.U.I. — modules for any kind of EQ
- **Signal-to-Noise Ratio:** (20 Hz - 20 kHz, 8 load) > 107 dB (unweighted) > 110 dB (A-weighted)
- **THD+N (typical):** 20 Hz - 20 kHz, 8 load, 3 dB below rated power < 0,01 %

- **SMPTE (typical):** 20 Hz - 20 kHz, 8 load, 3 dB below rated power < 0.01 %
- **Damping Factor:** 8 load, 1 kHz and below > 400
- **Dimensions (WxHxD):** 483 x 88.9 x 436 mm (19" 2U)
- **Shipping Dimensions (WxHxD):** 540 x 135 x 615 mm (0.045 m³)

(*) all channels driven, 1 kHz, 1% THD @ 230 VAC (**) mono bridged (†) parallel mono (††) peak power, component tolerance dependent (†††) different at Vortex 3 Quadro



TECTON SERIES power amplifiers

Tecton uses CAMCO's advanced technologies to deliver a range of amplifiers, where high audio quality, power and reliability is of highest priority.

Sonic Integrity

Based on the technology of the renowned Vortex series, the Tecton series offers excellent sonic integrity, with some of the markets best audio specifications delivering low distortion and high dynamic range.

Load & Cost Optimized

The Tecton series is optimized for either high or low impedance loads. This unique concept allows for complete application focus reducing unwanted feature and cost. Where specific tools are required for specific use Tecton delivers it all — even in the most power demanding venues.

Low Weight – High Reliability

With a weight of just 9Kg, the Tecton series is ideal for PA and Monitor installation in all market sections. CAMCO's rugged design and high reliability make the Tecton series a cost effective option for the discerning user.



features:

- High-Efficient-SMPS*
 - Three Operations Modes: Parallel Mono, Mono Bridged, Stereo
 - Output Current Monitoring
 - LED Indicators Operation Mode: Clip, Signal, Output Current
 - Input Sensitivity Selector
 - Selectable Clip-Limiter · Selectable Subsonic Filter · Ground Lift
 - DC Protection · Mains Fuse Protection
 - Over-Voltage Protection and Simple Remote-Control is optionally available
 - (* SMPS = Switch-Mode-Power-Supply)
 - Optional Remote Control, DSP & Network
- All Tecton amplifiers can be upgraded with CAMCO's advanced controller-modules. These offer the possibility for loudspeaker

management, remote control and digital audio network in any desired combination. The possibility for upgrades makes any CAMCO amplifier a future-proof investment.



The 3 position clip limiter provides accurate protection while maintaining the maximum power values possible. If the amp is overdriven, the clip detection triggers the Attack Release Circuit (ARC). The fine structure between fast and slow modes assures sonic integrity and maximum protection.



The signal section is designed as an Extended User Interface (EUI) module. This EUI can be replaced with upgrades such as integrated controller-DSP, remote control & digital audio network. This concept ensures CAMCO amplifier as a future proof investment that can take advantage of current as well as future available upgrades.



The whole PCB-board of the Tecton amplifier is hanging upside down inside the chassis. Dust or other particles that would normally gather up over time will simply fall off ensuring long-term reliable performance, even in heavily particle polluted environments.



TECTON 14.2**.2 Series: 2 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 226-watt
 · 4 20Hz-20kHz 1%THD: 420-watt
 · 2 20Hz-20kHz 1%THD: 730-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 452-watt
 · 8 20Hz-20kHz 1%THD: 840-watt
 · 4 20Hz-20kHz 1%THD: 1460-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 452-watt
 · 2 20Hz-20kHz 1%THD: 840-watt
 · 1 20Hz-20kHz 1%THD: 1460-watt

TECTON 22.2**.2 Series: 2 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 355-watt
 · 4 20Hz-20kHz 1%THD: 660-watt
 · 2 20Hz-20kHz 1%THD: 1140-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 710-watt
 · 8 20Hz-20kHz 1%THD: 1320-watt
 · 4 20Hz-20kHz 1%THD: 2280-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 710-watt
 · 2 20Hz-20kHz 1%THD: 1320-watt
 · 1 20Hz-20kHz 1%THD: 2280-watt

TECTON 28.2**.2 Series: 2 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 517-watt
 · 4 20Hz-20kHz 1%THD: 920-watt
 · 2 20Hz-20kHz 1%THD: 1420-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 1034-watt
 · 8 20Hz-20kHz 1%THD: 1840-watt
 · 4 20Hz-20kHz 1%THD: 2840-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 1034-watt
 · 2 20Hz-20kHz 1%THD: 1840-watt
 · 1 20Hz-20kHz 1%THD: 2840-watt

TECTON 24.4**.4 Series: 4 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 698-watt
 · 4 20Hz-20kHz 1%THD: 1216-watt
 · 2 20Hz-20kHz 1%THD: 1600-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 1396-watt
 · 8 20Hz-20kHz 1%THD: 2432-watt
 · 4 20Hz-20kHz 1%THD: 3200-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 1396-watt
 · 2 20Hz-20kHz 1%THD: 2432-watt
 · 1 20Hz-20kHz 1%THD: 3200-watt

**TECTON 32.4****.4 Series: 4 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 916-watt
 · 4 20Hz-20kHz 1%THD: 1595-watt
 · 2 20Hz-20kHz 1%THD: 1600-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 1836-watt
 · 8 20Hz-20kHz 1%THD: 3190-watt
 · 4 20Hz-20kHz 1%THD: 3200-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 1836-watt
 · 2 20Hz-20kHz 1%THD: 3190-watt
 · 1 20Hz-20kHz 1%THD: 3200-watt

TECTON 38.4**.4 Series: 4 optimised**

Stereo Mode: Both Channels Driven
 · 8 20Hz-20kHz 1%THD: 1136-watt
 · 4 20Hz-20kHz 1%THD: 1900-watt
 · 2 20Hz-20kHz 1%THD: 1500-watt

Mono Bridged

· 16 20Hz-20kHz 1%THD: 2272-watt
 · 8 20Hz-20kHz 1%THD: 3800-watt
 · 4 20Hz-20kHz 1%THD: 3000-watt

Parallel Mono

· 8 20Hz-20kHz 1%THD: 2272-watt
 · 2 20Hz-20kHz 1%THD: 3800-watt
 · 1 20Hz-20kHz 1%THD: 3000-watt

* Component Tolerance dependent—All specification subject to change without notice.

**specifications****All Tecton Models:**

· input gain: selectable: 26 dB, 32 dB, or 1,4 V input sensitivity
 · output circuitry: .2 Series: AB .4 Series: 2-Step Class H
 · SMPTE (typical) 20Hz-20kHz, 8 load 3dB below rated power THD+N (typical): < 0,02% THD

· 20 Hz-20 kHz, 8 load 3 dB below rated power: < 0,02% THD
 · frequency response: 20 Hz-20 kHz, ± 0,2 dB / 8 Hz-50 kHz, +0, -3 dB
 · damping factor: > 400
 · input impedance: 40 k balanced
 · fan: temperature dependent speed-controlled axial fan

· connectors each ch: Input: 3-pin XLR & 1/4" TRS balanced. Output: Neutrik Speakon
 · limiter: switchable peak-limiter
 · ground-lift: input ground-lift switch on back panel
 · signal-to-noise-ratio

· 20Hz-20kHz, 8 load: > 107 dB (unweighted) > 110 dB (A-weighted)
 · dimensions (W x H x D): 483 x 88,9 x 340mm (19", 2U)
 · weight: 9 kg



CAMCO Q Power series power amplifiers

CAMCO Q-Power Series is a new range of 4 channel, high output power amplifiers. The Q-Power 4, Q-Power 6 and the Q-Power 10 have been designed to provide that, Powerful Pure Sonic Performance which is now so synonymous with the CAMCO brand name.



Q POWER SERIES amplifiers

New Technology: The CAMCO Q-Power 10 introduces new class D amplifier technology offering smooth and responsive handling with massive power output while maintaining CAMCO's famous sonic integrity, the CAMCO Q-Power 6 uses class H technology, both models benefiting from the latest advances in CAMCO's SMPS technology, the resulting high power, lightweight units are at home in all professional applications.

Designed for flexibility of Use: With the introduction of the Q-Power series CAMCO aim to deliver simple, pure and reliable power for applications where cost and ease of use are paramount without lose of integrity.

Straight Forward Approach: CAMCO have paid attention to market requirements for a straight forward approach. In introducing the Q-Power Series CAMCO identified,

key elements, such as power output, loading, AC power supply flexibility and connectivity. The result is two, outstanding power output options, across four channels, in a 19" 2 RU rugged case design, suitable for professional Installations, Theatre and Live Sound applications.

features

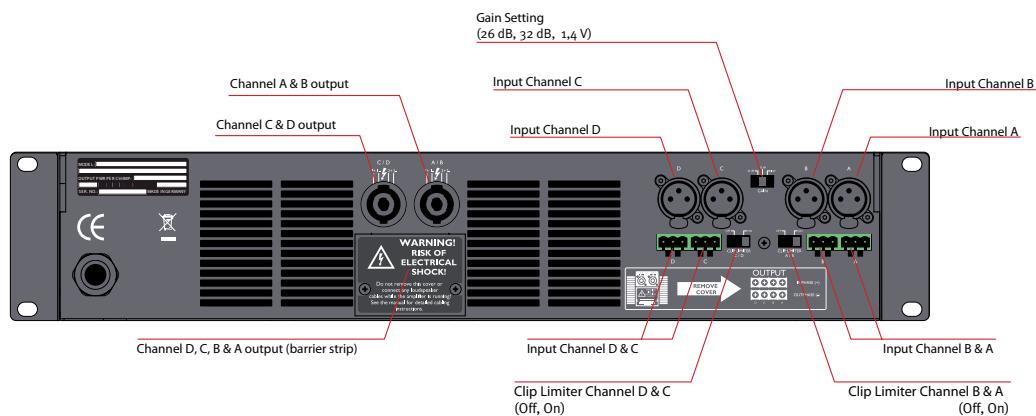
- Dual Voltage SMPS with automatic voltage selection for 120 V / 230 V operation
- Two temperature controlled cooling fans
- Two switchable peak-limiter for channel A+B and C+D
- 100 V/70 V (Q-Power 10), 70 V (Q-Power 6) line operation
- CAMCO Switch Mode Power Supply technology
- 2500 W (Q-Power 10) / 1500 W (Q-Power 6) max RMS output at 4 Ω per channel



Along with ABCD channel identification, clear LED status indicators above each potentiometer indicate; Amp on, Signal present (this is red if in protect mode), Output current and clip status, all information is clear and precise. A gain control security cover is also provided.



Flexible connectivity as standard; the input section is supplied with both XLR and Phoenix connectors, while the output section is supplied with both Speakon and Barrier Strip connectors with cover.



specifications

Specifications:		Q-Power 4	Q-Power 6	Q-Power 10
Power per channel All channels driven @ 1kHz, THD < 1%	16	292 W	470 W	620 W
	8	528 W	800 W	1100 W
	4	840 W	1000 W	1800 W
	4 Max RMS	1050 W	1500 W	2500 W
	70 V line operation	N/A	950 W	1600 W
	100 V line operation	N/A	N/A	625 W
Power per channel Single channel driven @ 1kHz, THD < 1%	16	302 W	480 W	620 W
	8	588 W	960 W	1350 W
	4	1100 W	1500 W	2400 W
	4 Max RMS	1200 W	1600 W	2600 W
No. of channels	4			
Max. Output Voltage	99Vp / 198Vpp	125Vp / 250Vpp	145Vp / 290Vpp	
Output Circuitry	Class H	Class H	Class D	
Signal To Noise-Ratio 20 Hz - 20 kHz, 8 load	> 115 dB (A-weighted) > 112 dB (unweighted)			
THD+N (typical) 20 Hz - 20 kHz, 8 load, 6 dB below rated power	< 0,01 %			
SMPTE 4:1 (typical) 60 Hz + 7kHz, 8 load 8 dB below rated power	< 0,01 %	< 0,01 %	< 0,02 %	
Damping Factor 8 load, 1 kHz and below	> 350	> 350	> 600	
Net Weight	10.6 kg	10.6 kg	11.5 kg	
Shipping Weight	12.6 kg	12.6 kg	13.5 kg	
Frequency Response 8 load, 1 dB below rated power	20 Hz - 20 kHz \pm 0,15 dB			
Input Impedance	15 k balanced			
Input Gain	selectable: 26 dB, 32 dB or 1,4 V input sensitivity			
Protection Circuits	inrush-current limitation, protection circuits against power on/off transients, temperature monitoring of transformers and heat-sinks, output DC protection, power transistor control, temperature dependent SOA protection, intelligent mains fuse protection			
Limiter	two switchable peak-limiter for channel A+B and C+D respectively			
Fan	2 temperature dependent speed-controlled axial fans			
Indicators	LED's for ON, SIGNAL/PROTECT, CLIP, Output Current			
Input Connectors	3-pin XLR, male and female per channel, pin 2 = in phase / Phoenix Connectors, pin 1 = in phase, pin 2 = GND			
Output Connectors	Two 4-pole SPEAKON connectors / Barrier Strip with protection cover			
Operation Voltage	Dual Voltage SMPS with automatic voltage selection for 120 V / 230 V operation			
Dimensions (WxHxD)	483 x 88.9 x 419 mm			
Shipping Dim. (WxHxD)	600 x 105 x 527 mm			
Accessories included	Gain pot security cover			



CAMCO D-Power Series Amplifiers

Following on from the introduction of the CAMCO Q-Power series of 4 channel amplifiers, the New D-Power series develops the range further with the introduction of three 2 channel models. All three models have been designed to provide that Powerful Pure Sonic Performance which is now so synonymous with CAMCO



D-POWER SERIES amplifiers

Following on from the introduction of the CAMCO Q-Power series of 4 channel amplifiers, the New D-Power series develops the range further with the introduction of three 2 channel models. The D-Power D2 1000 W per channel, the D3 1500 W per channel and the D4 2000 W per channel.

New Platform: All three models utilise a Hybrid Class H amplifier engine, offering smooth and responsive handling throughout the power range. All models benefit from the latest advances in CAMCO's SMPS technology, the resulting light weight units are at home in all professional applications. Use in combination with the Q-Power series or on their own, the D-Power series delivers pure and reliable power for applications where cost and ease of use are paramount without lose of integrity.

Designed for flexibility of Use: The introduction of the D-Power series now expands the choice and ability to refine system specification to exact requirements. D-Power power output specifications have been select to work as stand alone amplifiers or in combination with Q-Power series so that exact power formats can be matched with minimizing rack space and maintaining family function and design.

Simple Direct Approach: Once again paying great attention to market requirements for a strait forward approach, in introducing the D-Power series CAMCO has identified key elements, such as power output range, flexible connectivity and interaction with the Q-Power series. The resulting three models are of rugged design and suitable for professional Installations, Theatre and Live Sound application.

6 Years Warranty: CAMCO amplifiers renowned reliability is backed up by 6 years warranty from date of first purchase.



Clear LED status indicators above each potentiometer indicate; Amp on, Signal present (this is red if in protect mode), Output current and clip status.



Mode of operation
(Stereo, Mono, Parallel mono)

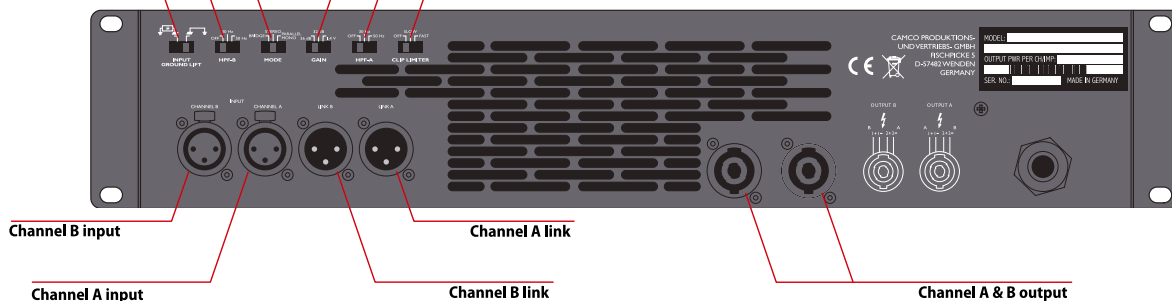
Gain Setting
(26 dB, 32 dB, 1,4 V)

High pass filter ch. B
(Off, 30 Hz, 50 Hz)

High pass filter ch. A
(Off, 30 Hz, 50 Hz)

Ground lift

Clip limiter
(Off, Slow, Fast)



specifications

Specifications:		D-Power 2	D-Power 3	D-Power 4
STEREO *1 All channels driven @ 1kHz, THD < 1%	16	370 W	483 W	608 W
	8	698 W	918 W	1123 W
	4	1216 W	1600 W	1900 W
	4 Max RMS	1300 W	1800 W	2200 W
	70 V line operation	1000 W	1500 W	1800 W
MONO BRIDGE Single channel driven @ 1kHz, THD < 1%	16 *2	1400 W	1800 W	2200 W
	8 *2	2400 W	3200 W	3800 W
	4 *3	1400 W	1800 W	2200 W
	2 *3	2400 W	3200 W	3800 W
No. of channels		2	2	2
Max. Output Voltage		110Vp / 220Vpp	125Vp / 250Vpp	140Vp / 280Vpp
Output Circuitry		Class H		
Signal To Noise-Ratio 20 Hz - 20 kHz, 8 load		> 115 dB (A-weighted) > 110 dB (unweighted)		
THD+N (typical) 20 Hz - 20 kHz, 8 load, 6 dB below rated power		< 0,01 %		
SMPTE 4:1 (typical) 60 Hz + 7kHz, 8 load 8 dB below rated power		< 0,01 %		
Damping Factor 8 load, 1 kHz and below		> 400		
Net Weight		9.4 kg		
Shipping Weight		11 kg		
Frequency Response 8 load, 1 dB below rated power		20 Hz - 20 kHz \pm 0,2 dB		
Input Impedance		15 k balanced		
Input Gain		selectable: 26 dB, 32 dB or 1,4 V input sensitivity		
Protection Circuits		inrush-current limitation, protection circuits against power on/off transients, temperature monitoring, output DC protection, power transistor control, temperature dependent SOA protection, intelligent mains fuse protection		
Limiter		three-step switchable peak-limiter		
Fan		2 temperature dependent speed-controlled axial fans		
Indicators		LED's for ON, SIGNAL/PROTECT, CLIP, Output Current		
Input Connectors		3-pin XLR, male and female per channel, pin 2 = in phase		
Output Connectors		Two 4-pole SPEAKON connector for each output channel (bi-amping possible)		
Dimensions (WxHxD)		483 x 88.9 x 419 mm		
Shipping Dim. (WxHxD)		600 x 105 x 527 mm		
Accessories included		Gain pot security cover		

*1 All channels driven, 1kHz, 1% THD @ 230 VAC

*2 Mono Bridged

*3 Paralell Mono



CAI INTERFACE remote control

CAMCO Vortex series amplifiers are supplied with a remote control facility as standard (Camco Amplifier Interface - CAI). The Tecton series can be upgraded for remote control via the use of the controller-module or a combined controller / network-module.

Cost Efficient Network: The CAI interface is a cost efficient solution, which via a RJ11 connector handles all the amplifiers settings and status readings. Up to 32 amplifiers can be daisy chained together into a CAI network (blue lines on the illustration above).

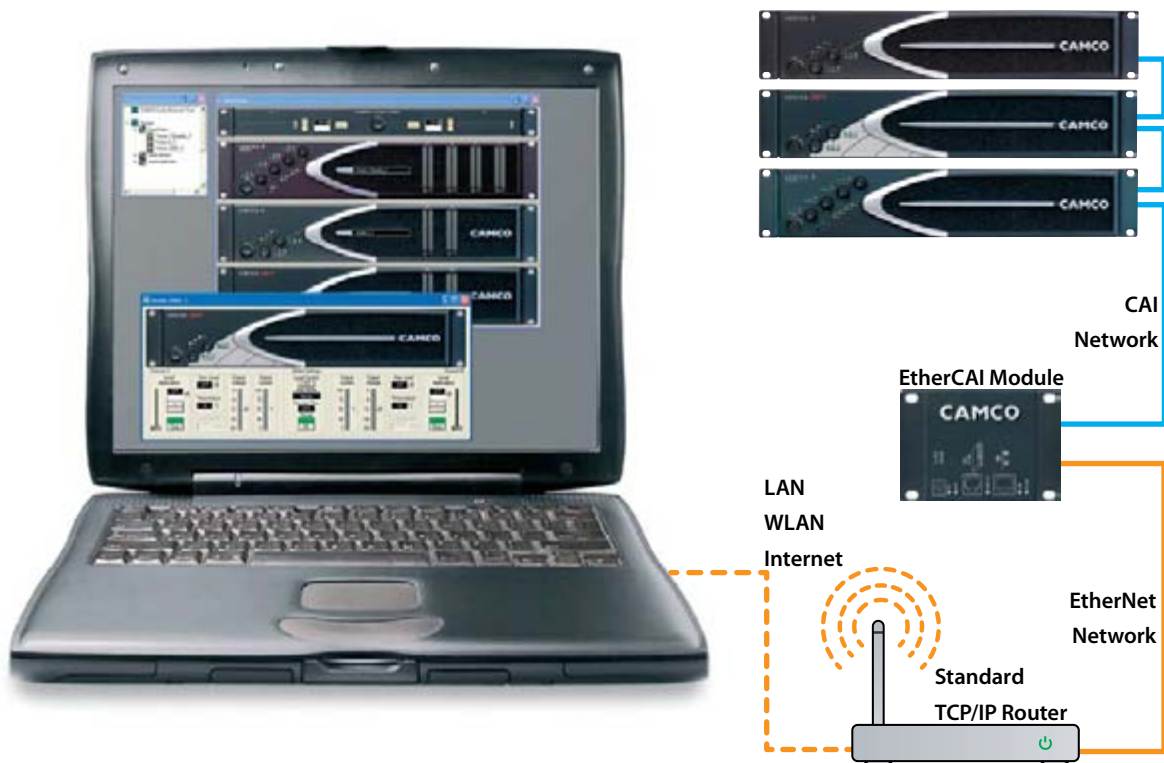
Ethernet & TCP/IP Compatible:

The EtherCAI module is a network-bridge between the CAI network (blue lines) and a standard TCP/IP & Ethernet network (orange lines) which together makes an EtherCAI network (blue + orange lines). Thus remote control is possible through LAN, WLAN and the Internet.

Remote Control of Infinite Amplifiers: Several EtherCAI modules can be connected to the same standard Ethernet router. There's no upper limit to the number of amps which can be remote controlled by a PC over EtherCAI network.

User-friendly Software: The remote control software provides a user-friendly and intuitive graphical user interface, which enables remote control of all amplifiers connected to the EtherCAI network. All registered users of CAMCO amplifiers can receive CAMCO's remote control software free of charge. Please contact your CAMCO dealer for further information.

Control of All Parameters: The WinCAI software provides access to all the amplifiers front plate readouts, amongst others: Signal, Clip and Protect. Additionally the amplifiers mute function is also accessible. Furthermore WinCAI offers peak meter readouts of the output stages voltage and current as well as dynamic readout of the amplifiers temperature.



The WinCAI remote control software offers different views of amplifiers in a group, for easy overview and control. Illustrated here vertical, horizontal and rack-view of the same amplifier group.

Amplifier groups and views are easy to define by drag'n'drop functionality in the network tree (upper left corner).



CAMCO Controller Modules

CONTROLLER MODULES

CAMCO's new controller-modules allows the upgrade of a CAMCO amplifier into a Universal Controller Amplifier (UCA), with the option for advanced audio network and remote control.

Loudspeaker Management System:

The controller-module offers a complete loudspeaker management system. Per channel it offers 30 fully parametric EQ's, delays, IIR-filters, X-over up to 10th order and 2 independent limiters.

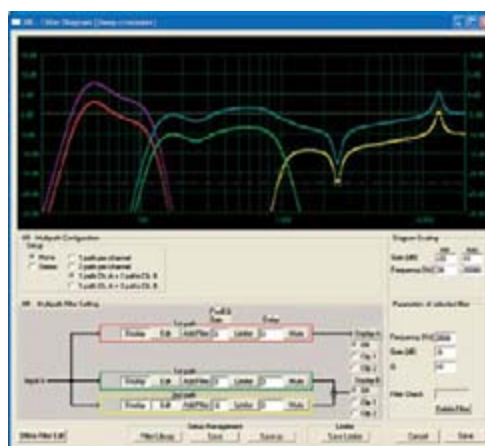
Audio Network, Your choice: The controller-module is available in three input formats. The choice is yours. Either, analog, EtherSound or CobraNet. Total compatibility with today's standards within digital audio networks.

Remote Control as Standard: As standard the controller-module offers access to the remote control of the amplifier. For controller-modules with audio network input, remote control can be achieved

via this network, thus avoiding two cable lines to the amplifiers.

Controller Software: Access, configuration and control of the controller-modules are achieved via the controller software, which also functions as the remote control software. Software is free for all registered users; please see your local CAMCO dealer for further information.

Linear Frequency and Phase Response: A unique feature is the possibility to use advanced FIR-filter settings by downloading speaker parameters from an accredited measurement system. This makes it possible to achieve a linear frequency and phase response from any loudspeaker or loudspeaker system. Please contact CAMCO for further information.



The powerful controller DSP offers up to 4 paths in a multi-path routing structure. This allows emulation of passive X-over filters, thus making it possible to control EQ, limiter and delay settings for individual speaker drivers in a passive X-over system.

The advanced thermo and peak limiter functions can be combined with the amplifier's limiter, thus always maximising power output of the entire system with optimal protection.

Specifications:	UCA-X-AN	UCA-X-ES	UCA-X-CN*
Audio Network	-	EtherSound	CobraNet
Input Connector	2 x 3 pin XLR	RJ45 EtherCon	RJ45 connector
No. of Channels	2	2 of 64	2 of 64
Remote Control	via CAI port	Via audio network	Via audio network
Software	WinCAI	WinCAI	WinCAI
AD Converter	127 dB dynamic range	-	-
Max. input level	22 dBu	-	-
Sample Rate	48 kHz	48 kHz	48 kHz
Analogue outputs, internal Converter:	24 Bit with Delta/Sigma converters		
Output voltage:	1,4 V RMS, optimised for Vortex and Tecton amps		
Dynamic range:	114 dB typical, optimised for Vortex and Tecton amps		
Latency:	1 ms from input to analogue output		
Routing & gain:	Routing of all inputs. Gain adjustment on input and output of UCA Module		
Limiters per channel:	Independent limiters, adjustable in threshold and release time.		
Delay:	Up to 1,8 sec 21 usec increments		
Filters & EQ per channel:	Graphic EQ-settings. Drag-and-drop control of filter curves. 30 fully parametric EQs, adjustable in frequency, amplitude, quality and characteristic. X-over up to 10th order. shelving filters		
Speaker protection:	Foresight limiter with "controlled overshoot" for utilisation of the impulse reserves of the amplifier with regards to the loudspeaker's thermal equivalent circuit diagram		
FIR-filters:	Possibility for high-precision FIR-filtering via the accredited measurement systems. Optimisation to a designated transfer function.		

* In preparation

