

Eton Power 220.4 – four-channel amp out of the new Eton “Power” series



Top class with four channels

► **The four channel 220.4 completes the Eton Power series. We put the power house to the test.**

The company ETON located in Neu-Ulm, has brought out a lot of new amplifiers in recent months. The Power series amps are right up there in the Top Class category – and the name says it all. Having already tested the two-channel Power 450.2 and the six-channel model Power 150.6, we now come to the golden mean with the Power 220.4. Four-channel power amps are a dime a dozen, so every manufacturer has to go the extra mile if the amp is to be a bit special. Up to now Eton has done everything right with the Power series. The latest technology, compact size and plenty of power speak volumes for the new amplifier series. The configuration is also to the latest stan-

dard. As with the other Power amps the included remote control operates the last two channels for controlling a subwoofer. There are dedicated high-level inputs for working with the factory radio; as desired, these can be set with a DC or AC controlled auto turn-on. Concealed under a slim cover on the top of the housing we find the crossovers; these are asymmetric filters for the channel pairs. At the front the high pass is good up to 6 kHz, while the low pass is at the rear. In addition the crossovers have a range change-over switch so that the frequencies can be precisely set. The resolution of the potentiometers is also helpful here so that the Eton is really easy to operate.

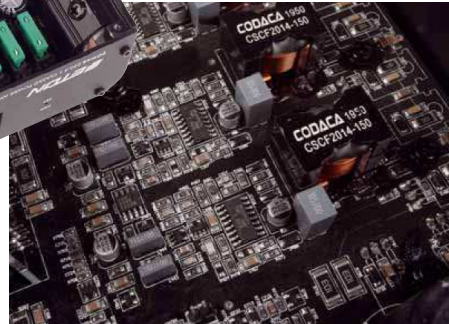
To save space the inside is packed with a host of tiny SMD components. The use of 3 x 30 amp fuses promises plenty of power, with the main board equally divided between power supply and amplification. For each of the four amplifier channels we have a Class-D driver chip, which also provides safeguard switching. Furthermore, this little fellow can be programmed so that as little distortion is produced as possible. Two conventional MOSFETs then do the power amplification. At first glance these are not visible as they are mounted on a heat sink under the circuit board. Finally, properly sized coils are responsible for retransformation of the signal by low-pass filtering.

Measurements and Sound

Now let us look at what comes out at the other end, and for the Power 220.4 that is hell of a lot. Across the entire output range the Eton consistently produces little distortion in the region of 0.02 to 0.03 %. It is therefore a particularly clean working amplifier so there is no



A large mains transformer and four electrolytic capacitor buffers ensure voltage stability



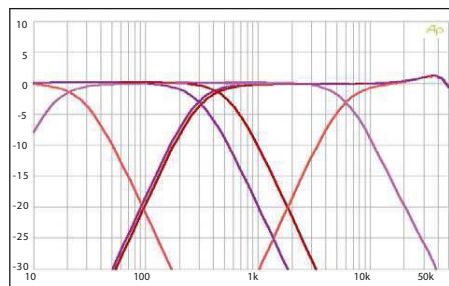
Each channel has a programmable Class-D driver chip

need to worry about signal fidelity. And there is plenty of power, actually as much as 128 watts per channel into 4 ohms. At a permissible 2 ohms it then delivers 217 watts to the loudspeaker, and not a bit more distortion than at 4 ohms. No fault could be found with the signal-to-noise ratio and damping so the Power 220.4 comes out of the lab with a good score. Delivering a powerful performance is what the Eton device particularly likes to do. With a juicy 128 watts it can cope with any woofer so that a torrent of extremely powerful bass sounds are heard. Base drum thunder sounds controlled and precise. Even when the bass has to be really deep, the Power shows not the slightest sign of giving in. In addition it impresses with grown up virtues like the careful treatment of the musical material. From the jazz trio to the orchestra it is always easy to enjoy the feel

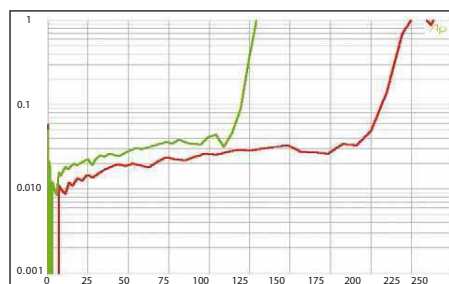
of the recording to the full. The Eton brings so much melodiousness and atmosphere into play that the avowed music lover will find full satisfaction. All musicians and instruments stand firmly in the center of the virtual stage, which makes us totally happy.

Summary

With the four-channel Power 220.4 Eton has again done very well. Its quality, features, test figures and sound are all at the highest level. Congratulations!



Thanks to the high PWM frequency the Eton has no problem at 50 kHz. The filters complement each other in two ranges up to 6 kHz



Extremely low distortion both into 4 and 2 ohms. And with plenty of power despite the compact construction



Typical Eton Power series: concealed pots and switches, asymmetric crossovers for the channel pairs

SOUND-TIP
Top-Class
CAR & HiFi 3/2021



Eton Power 220.4

Price about 360 Euro
Distributor ACR, CH-5330 Zurzach
Hotline info@etongmbh.com
Internet www.etongmbh.com

Summary

▶ Sound quality	40 %	1,1	■■■■■
Bass	8 %	1,5	■■■■■
Neutrality	8 %	1,0	■■■■■
Transparency	8 %	1,0	■■■■■
Soundstaging	8 %	1,0	■■■■■
Dynamics	8 %	1,0	■■■■■
▶ Lab	35 %	1,5	■■■■■
Power	20 %	1,5	■■■■■
Damping factor	5 %	2,0	■■■■■
Distortion	5 %	1,5	■■■■■
Signal/Noise Ratio	5 %	1,0	■■■■■
▶ Practice	25 %	1,1	■■■■■
Features	15 %	1,0	■■■■■
Workmanship electr.	5 %	1,0	■■■■■
Workmanship mech.	5 %	1,5	■■■■■

Technical Data

Channels	4
Power @ 4 ohms	128
Power @ 2 ohms	217
Power @ 1 ohms	0
Power bridgegd 4 ohms	434
Power bridgegd 2 ohms	0
Sensitivity max mV	500
Sensitivity min V	6,7
THD+N (<22 kHz) 5 W	0,012
THD+N (<22 kHz) half load	0,030
Signal/Noise Ratio dB(A)	87
Damping 20 Hz	131
Damping 20 Hz	131
Damping 20 Hz	127
Damping 20 Hz	123
Damping 20 Hz	19
Damping 16 kHz	8

Features

Lowpass	30 – 300 Hz, 300 – 6k (CH34) Hz
Highpass	15 – 300/300 – 6k (CH12) Hz
Bandpass	15 – 6k (CH34) Hz
Bass-boost	–
Subsonicfilter	by HP
Phaseshift	–
High-Level inputs	•
Autosense	• DC or signal
RCA outputs	–
Start/Stop compatible	• (7,3 V)
Dimensions (L x W x H in mm)	247 x 146 x 50
Other	remote, 2, or 4 CH In

Eton Power 220.4

Top-Class 1,2

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Price/performance: excellent

"A top class four-channel power amp"