

ETON MICRO 250.4 • TEST REPORT CAR&HIFI 4/2022

FETON

Eton Micro 250.4: Sound upgrade with four channels

Mini © A-channel Doveramp

Not long ago Eton presented the Micro 120.2, its first tiny 2-channel power amp, which rightly bears the name Micro. This has now been followed by a 4-channel model, the Micro 250.4.

With the Mini power amps Eton had already shown that it is possible to accommodate lots of power in the tiniest space. The Micro series goes a step further: with palm-sized dimensions these power amps still pack enough power for a component speaker system or a small subwoofer. Thus in test the Micro 120.2 managed 2 x 78 watts at 4 ohms and a staggering 2 x 120 watts at 2 ohms with a size of only 110 x 80

x 42 millimeters. The Micro 250.4, however, follows another concept as its 2-channel sister. Instead of offering four channels for double the size, at 127 x 94 x 42 The encapsulated class D coils and the power supply transformer dominate the board. The control panel is concealed under aluminum covers; there are separate high and low inputs

millimeters it is only slightly bigger than the 120.2. That certainly makes them among the smallest four-channel power amps on the market. On the other hand, however, that also means compromises in the channel performance to avoid overheating. But instead of simply giving the 4-channel 4 x 40 watts at 4 ohms and 4 x 60 watts at 2 ohms, they have decided on another way. The Micro 250.4 is specialized to work into 4 ohms and asymmetrically designed. This means it has two normal channels at 40 watts and two extra powerful channels at 80 watts. That everything occurs at 4 ohms is sensible because it is not the intent to design a fully-fledged multichannel system here, but to breathe a bit more life into an



Power and speakers are connected via plugs

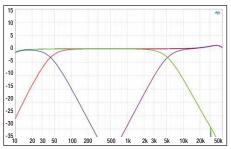


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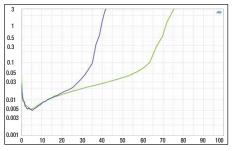


Gain and crossover controls are concealed under a small aluminum lid

original system. The perfect application is a BMW or Mercedes system with a simple factory configuration. Here the Micro 250.4 is ideally suited to give the front doors 40 watts and the front woofers 80 watts on each side. For its task as a mini sound upgrade it is well equipped with low and high level inputs and Auto turn-on either by DC or signal as required.



The Micro 250.4 offers straightforward crossovers, the control range being extendable up to 5 kHz with multipliers



You can see from the front channels (blue) and rear channels (green) that they come from ICs of identical design. There is only 4-ohm performance

Measurements and Sound

Returning briefly to the Micro 120.2, it showed a maximum output of 2 x 120 watts at 2 ohms. In the case of the Micro 250.4 we measured 2 x 39 watts + 2 x 72 watts at 4 ohms, altogether then 222 watts. That is approximately as much as with the 120.2 — that's OK! The damping factors lie above 100, and both distortion and noise figures are excellent. The only negative is that you cannot bridge these little devices — the chips could do it, but the size will not allow it. Tonally we are talking a very high level here. The music comes out of the speakers clear and rich in detail. All channels make a great sound in themselves, with the strong channels also being somewhat louder. We then tried the Micro 250.4 on a 3-way partially active system as in the BMW and Mercedes. And, well, then the sun came out. Lush bass thunders out of the woofers, and the 10-centimeter component speaker system really went to town in the upper mid-range as regards spatiality and reproduction of vocals. Experiment successful!

Summary

The Micro 250.4 from Eton is pleasing precisely because it is different. Although it is not 2-ohm stable and not bridgeable, it is a great solution for its application area of powering a small speakers + woofers in 4 ohm stereo.



| Eton Micro 250.4 | | | | |
|---|---|-----|--|--|
| Price Distributor Hotline Internet | about 220 Euro ACR, CH-5330 Zurzach info@etongmbh.com 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 % | 1,9 | | |
| Power | 20 % | 2,5 | | |
| Damping factor | - | - | | |
| Distortion | 5 % | 1,0 | | |
| Signal/Noise Ratio | 10 % | 1,0 | | |
| Practice | 25 % | 1,6 | | |
| Features | 15 % | 2,0 | | |
| Workmanship electr. | 5 % | 1,0 | | |
| Workmanship mech. | 5 % | 1,0 | | |

Technical Data

| Channels | 4 |
|---------------------------|-----------------|
| Power @ 4 ohms | 2 x 39 + 2 x 72 |
| Power @ 2 ohms | 0 |
| Power @ 1 ohms | 0 |
| Power bridegd 4 ohms | 0 |
| Power bridegd 2 ohms | 0 |
| Sensitivity max mV | 450 |
| Sensitivity min V | 8,0 |
| THD+N (<22 kHz) 5 W | 0,005/0,006 |
| THD+N (<22 kHz) half load | 0,015/0,024 |
| Signal/Noise Ratio dB(A) | 91/90 |
| Damping 20 Hz | 115/102 |
| Damping 80 Hz | 112/104 |
| Damping 400 Hz | 112/104 |
| Damping 1 kHz | 104/102 |
| Damping 8 kHz | 21/22 |
| Damping 16 kHz | 6/6 |

Features

| Lowpass | 50 – 5k Hz |
|------------------------------|------------------------------------|
| Highpass | 50 – 5k Hz |
| Bandpass | |
| Bass-boost | - |
| Subsonicfilter | - |
| Phaseshift | - |
| High-Level inputs | • |
| Autosense | , DC or signal |
| RCA outputs | - |
| Start/Stop compatible | • (7,0 V) |
| Dimensions (L x W x H in mm) | 127 x 94 x 42 |
| Other | 2 or 4-CH In |
| | |

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