



ETON PW 8 PW 10 PW 12 • TEST REPORT CAR & HIFI 5/2021

PW 8 + PW 10 + PW 12: New Subwoofer Series from Eton

A close-up photograph of three Eton subwoofers. They are arranged in a triangular pattern on a dark, textured surface. Each subwoofer has a black frame and a central cone with the ETON logo. The subwoofers are of different sizes, corresponding to the PW 8, PW 10, and PW 12 models.

**Low-priced  
subwoofers**





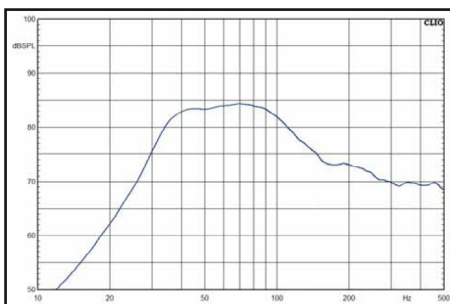
The PWs are not flat woofers. With their thick drive motors they need full-sized cabinets

► With the PW subwoofers Eton is bringing a new series to the dealers, who have taken up the cause of providing maximum quality at an entry-level price. Here we test the three models PW 8, PW 10 and PW 12.

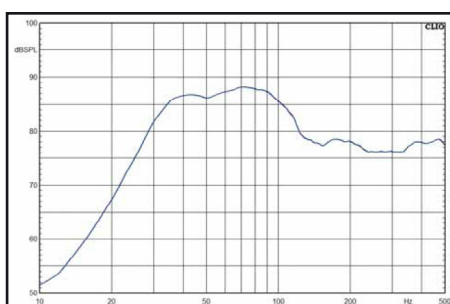
Beside the Force SPL crackers and the Move all-rounders Eton now has a new series of 8, 10 and 12 inch subwoofer chassis and cabinet subwoofers simply dubbed the PW Series. Prices for the chassis begin at a friendly 100 euros so you can build and customize your own woofers at a very reasonable

price. The three PWs have been very ambitiously designed despite the understated look so typical for Eton. Eton has made no experiments with the cones. As for all normal subwoofers the PW cones are made of air-dried paper. They are set in foam surrounds that are built more for height than width so that at full stroke the least possible cone surface is lost. Like all low-priced subwoofers the baskets are made of sheet metal. Those here are of the more stable kind on account of the three dimensionally stamped basket spokes. The drivers are protected by large surface rubber sleeves, mainly for appearance. Large area rear vent openings and rounded pole piece holes for a favorable air flow produce excellent ventilation. With installation depths from 13 to 15 centimeters the PWs are not flat woofers, but in return it was not

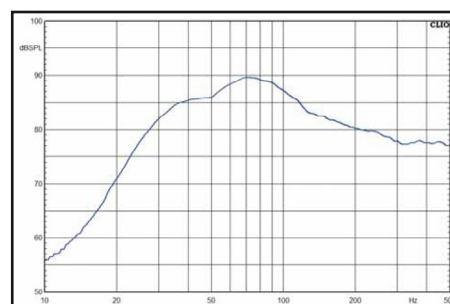
necessary to make any compromises in the design. All woofers have ample freedom of motion by which is meant the mechanically possible stroke of the moving mass. Unexpectedly, the little PW 8 leads with 30 millimeters, while the PW 10 and PW 12 achieve an entirely adequate 25 millimeters. Actually, the drivers of the three are individually designed: there is no standard driver here with Thiele/Small parameters that may get unmanageable in the case of the small or large cones. The PW 8 works with a well dimensioned 50 mm voice coil, while the two larger PWs have even been given ones with 64 mm diameters. As regards the electrical excursion the PW8 and PW 10 are best at more than 10 millimeters. However, the PW 12 must be content with less than 10 millimeters, the large cone surface helping it not fall behind the performance of its little brothers.



The small cone surface area of the PW 8 is not evident in its amplitude response, the level being fully adequate level across all important bass frequencies



The PW 10 delivers a very well balanced frequency response. At 87 dB/1W the sensitivity is decent and the cut-off frequency reasonably low at just under 35 Hz



The PW 12 runs down to deep bass with a tear-off edge at just over 30 Hz. Above 50 Hz it almost achieves the 90 dB/1 W mark

### Measurements and Sound

Our parameter measurements yield relatively high total Q factors for the PWs, though these are balanced out again by tight suspensions with a correspondingly small Vas. Perhaps they will not run in the very smallest mini enclosures, but they can be built compactly. In bass reflex enclosures the fun starts at around 15 liters for the PW 8, while the PW 10 is happiest with

boxes above 30 liters. The large PW 12 runs from 35 liters, but there are no real limits above that; if you have 50 liters then you should let it have it. We found the tuning frequencies of bass reflex systems turned out at 42, 38 and 36 Hz which in practice is in the right area. In the hearing test the PWs show their different characters. The PW 12 shines with masterful pressure, the PW 10 brings out a solid punch across all bass frequencies, and the PW 8 plays lightning quick without neglecting the deep frequencies. With fast bass lines the PW 8 and PW 10 are head to head, sounding similar, that is to say super clean without appearing too thin. The PW 10 then leaves the PW8 behind at maximum level, and even the PW 12 can hardly improve on that. Its strength lies in its mature performance: when it plays there is always enough pressure and deep bass in all situations. Altogether the PW 10 is capable of taking center stage, as it can do everything and really well too. The little PW8 is not far behind, and is recommended for small enclosures and a super crisp sound. Conversely, by all means go for the PW 12 if the space is there and you want a masterful bass sound.

### Conclusion

With the PW Series Eton has done everything right. With the PW 8, PW 10 and PW 12 you get a lot of sound for a very reasonable outlay.



Nicely made: basket struts and rubber sleeve produce a unified look



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Upper-Class  
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**SOUND-TIP**  
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Subwoofers	Eton PW 8	Eton PW 10	Eton PW 12
Price	about 100 Euro	about 140 Euro	about 180 Euro
Distributor	ACR CH-Zurzach info@acr.eu www.acr.eu	ACR CH-Zurzach info@acr.eu www.acr.eu	ACR CH-Zurzach info@acr.eu www.acr.eu
Hotline			
Internet			
<b>Summary</b>			
▶ Sound quality 50 %	1,0	1,0	1,1
Bass foundation 12,5 %	1,5	1,0	1,0
Pressure 12,5 %	1,0	1,0	1,0
Accuracy 12,5 %	1,0	1,0	1,0
Dynamics 12,5 %	0,5	1,0	1,5
▶ Lab 30 %	1,8	1,7	1,7
Frequency response 10 %	1,0	1,0	1,5
max. volume 10 %	3,0	2,5	2,0
Distortion 10 %	1,5	1,5	1,5
▶ Practice 20 %	1,5	1,5	1,5

### Technical data

	Eton PW 8	Eton PW 10	Eton PW 12
Chassis diameter	21,6 cm	27,8 cm	32,6 cm
Mounting cutout	18,6 cm	23,4 cm	28,6 cm
Mounting depth	13,1 cm	13,5 cm	15,2 cm
Magnet diameter	13,0 cm	15,2 cm	16,2 cm
Weight	4,6 kg	6,0 kg	7,0 kg
Nominal impedance	2 x 2 Ohm	2 x 2 Ohm	2 x 2 Ohm
DC resistance Rdc	3,71 Ohm	4,04 Ohm	4,05 Ohm
Coil inductivity Le	2,73 mH	2,87 mH	2,91 mH
Coil diameter	50 mm	64 mm	64 mm
Cone surface Sd	194 cm <sup>2</sup>	327 cm <sup>2</sup>	531 cm <sup>2</sup>
Resonance frequency fs	42 Hz	41 Hz	40 Hz
Mechanical quality Qms	5,91	6,93	6,60
Electrical quality Qes	0,63	0,72	0,67
Total quality Qts	0,57	0,65	0,61
Equivalent volume Vas	6,8 l	14,9 l	32,2 l
Moving mass Mms	111 g	152 g	195 g
Rms	4,94 kg/s	5,64 kg/s	7,39 kg/s
Cms	0,13 mm/N	0,10 mm/N	0,08 mm/N
B <sup>1</sup>	13,14 Tm	14,82 Tm	17,14 Tm
Pressure 1 W, 1 m	84 dB	87 dB	89 dB
Power handling	200 – 500 W	200 – 600 W	200 – 600 W
Test chamber	BR 14,5 l	BR 30 l	BR 34,5 l
Tunnel (d x l)	25 cm <sup>2</sup> x 18 cm	56 cm <sup>2</sup> x 25 cm	264 cm <sup>2</sup> x 22 cm

Upper-Class 1,3

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Price/performance: excellent

"Successful all-rounder at a reasonable price."

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