

Emphaser ESW-M8 + ESW-M10:
Monolith series subwoofer chassis

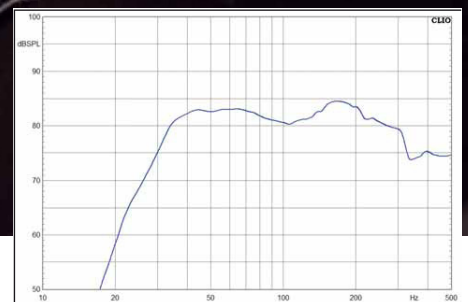


Subwoofers 8" and 10"

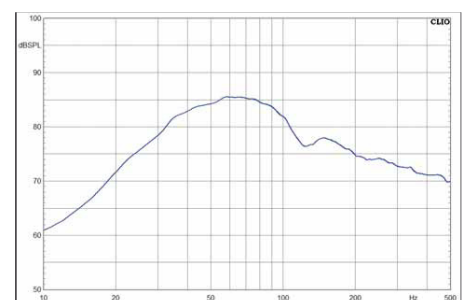
► After Emphaser came up with its speakers, power amps and subwoofers for enclosures in the Monolith series, we now have two handsome subwoofer chassis here for test.

The two woofers ESW-M8 and ESW-M10 claim to be truly universal. Good sound from (almost) any enclosure is what they like to deliver. At prices from 130 and 150 euros they are also affordable for the ordinary person, and offer a whole lot for the money. The quality feels at least a price class higher. With the M8 and M10 Emphaser has splashed out and endowed them with superb features. Starting with the baskets, these are made from robust die-cast aluminum, whereas other manufacturers prefer cheaper sheet metal baskets. Also the cones of both

are of aluminum — a good choice for subwoofers in the interests of a “piston-like” cone motion. So that this is perfectly linear, spiders made of Connex, a blended fabric of cotton and Nomex, are used. There are also nice details, like the front and back seals on the basket flange. Moreover, the baskets are superbly ventilated, to which the generously chamfered pole boreholes also contribute. Both pole plates have also been finely planed — a clear quality criteria, for the steel plates then closely about the magnet rings. The drivers of both woofers have 50 mm voice coils



The ESW-M8 runs like a dream in 26 liters with an amazingly low cut-off frequency of 33 Hz. Only 83 dB at 1 W is the compromise for a small cone surface area



The ESW-M10 shows a perfect working range from 33 to 100 Hz, the 85 dB at 1 W lying in the normal range for a 10 inch subwoofer

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The drivers are equipped with slim ferrite rings, exposed pole pieces ensuring additional freedom of movement

on Kapton formers, definitely not a measly dimensioning for 8 and 10 inch speakers.

Measurements and Sound

The measured Thiele/Small parameters indicate both the M8 and the M10 play in any type of enclosure. The M8 shows quality factor and equivalent volume perfectly in the mid range, whereas with the M10 low Q and large volume balance each other out. Therefore the M8 works in sealed boxes of 7 to 14 liters, whereas the M10 with 9 to 20 liters needs just a little more. In bass reflex the M8 with between 18 and 25 liters feels very much at home, while the M10 needs 25 to 40 liters behind the cone. It may be that bandpass enclosures are only a bit bigger than the reflex variants. We put the M8 in a fairly generous enclosure of 26 liters, which it liked with an excellent frequency response and tuning at 39 Hz.

The M10 plays in 32 liters and achieves the same tuning. Tonally, although smaller the M8 in fact sounds very mature. It delivers enough rich deep bass content for commonly played music. In addition it is a model of dynamism, playing punchy bass tones with growing enthusiasm. The M10 follows in the same direction, also delivering nice precise bass beats to the ear. The M10, though not quite so boisterous as the M8, nevertheless also plays anything but sluggishly. Instead, as expected it delivers a bit more pressure, sounds fatter whatever the style of music, but is not muddy. In this case it is difficult to say which one is to be preferred. The only way is to go and consult your dealer.

Summary

Emphaser has completed its Monolith series with two small but fine woofers. These are handsomely made with a quality finish and pleased us with their very good sound.

M8 and M10 have extremely well ventilated die-cast baskets and drivers with 50 mm voice coils



Subwoofer	Emphaser ESW-M8	Emphaser ESW-M10
Price	about 130 Euro	about 150 Euro
Distributor	ACR CH-Zurzach info@acr.eu www.acr.eu	ACR CH-Zurzach info@acr.eu www.acr.eu
Hotline		
Internet		

Summary			
▶ Sound quality	50 %	1,1	1,1
Bass foundation	12,5 %	1,0	1,0
Pressure	12,5 %	2,0	1,5
Clearance	12,5 %	1,0	1,0
Dynamics	12,5 %	0,5	1,0
▶ Lab	30 %	1,8	1,8
Frequency response	10 %	1,0	1,0
Efficiency	10 %	3,0	3,0
max. volume	10 %	1,5	1,5
▶ Workmanship	20 %	1,0	1,0

Technical data		
Diameter	21,2 cm	26,0 cm
Mounting diameter	18,6 cm	23,8 cm
Mounting depth	11,1 cm	13,8 cm
Magnet diameter	12,0 cm	14,0 cm
Weight	3,1 kg	4,7 kg
Nominal impedance	4 ohms	4 ohms
DC resistance Rdc	3,79 ohms	3,87 ohms
Coil inductivity Le	2,43 mH	2,87 mH
Coil diameter	50 mm	50 mm
Cone surface Sd	189 cm ²	330 cm ²
Resonance frequency fs	33 Hz	26 Hz
Mechanical quality Qms	4,58	5,00
Electrical quality Qes	0,51	0,38
Total quality Qts	0,46	0,35
Equivalent volume Vas	14,7 l	44,1 l
Moving mass Mms	81 g	129 g
Rms	3,61 kg/s	4,02 kg/s
Cms	0,30 mm/N	0,29 mm/N
B*1	11,12 Tm	14,72 Tm
Pressure 2 V, 1 m	83 dB	85 dB
Power handling	250 – 400 W	250 – 400 W
Test chamber	BR 26 l	BR 32 l
Port (d x l)	7 x 25 cm	7 x 21 cm

Upper-Class	1,3	Upper-Class	1,3
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Price/performance: excellent		Price/performance: excellent	
"Small, fine woofers at an attractive price."		"Small, fine woofers at an attractive price."	