

SM11

Professional digital monitoring speaker



Exclusive acoustical technologies

- **Beryllium inverted dome tweeter**

The inverted dome tweeter is a hallmark of Focal.

As a result of more than twenty years of development into a tweeter that could produce a high output, but without requiring high energy input and without increasing directivity. The introduction of the pure Beryllium dome, capable of covering 5 full octaves from 1,000 to 40,000Hz constitutes a new decisive advance regarding new audio formats.

- **Focus Ring**

This innovative and patented magnetic structure provides extremely strong flux density (2 Teslas) with the highest thermal stability achievable, without any risk of irreversible demagnetization when listening at high level.

- **The "W" cone**

Focal has been developing the technologies of composite sandwich cones for more than 15 years. The "W" process (Glass/Foam/Glass), first initiated in 1995 with the reference loudspeaker Grande Utopia, now provides a true optimization of the frequency response by fine tuning of mass, rigidity and damping parameters.

- **Passive radiator**

In order to reproduce the lowest frequency range within a very small volume without any air flow noises, the SM11 is equipped with a no compromise, custom designed "W" passive radiator.

Advanced digital technologies

- **24 Bits / 96kHz converters**

In addition to a direct digital input, the SM11 uses the latest high quality chipsets performing 24 Bits 96kHz A/D and D/A conversion.

- **Multiple equalization facilities**

The combination of very powerful DSP (Digital Signal Processor) devices and carefully designed algorithms allows multiple and very precise equalization.

- **"Sweet Spot"**

A dedicated processing algorithm enables to optimize and tailor the SM11 response according to the listener's position with regards to the speakers.

- **Control**

The SM11 can be controlled thanks to the "Focal Manager" software supplied. This software is compatible PC/Mac.

High performance amplification

- **High efficiency amplifier Class "D"**

Tri-amplified (250W rms/Bass, 150W rms/Midrange, 100W rms/Treble), the SM11 uses low distortion class "D" power stages for low and mid-frequency channels, reducing dramatically heat at high power, while wide bandwidth class AB stage is used for the tweeter.



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Technical specifications

System		
Frequency response	34Hz - 40kHz +/-2dB	
Maximum SPL	118dB SPL (peak @ 1m)	
Input section		
Analog input	Type / Impedance	Electronically balanced/ 10kOhms
	Connector	XLR
	Sensitivity	Adjustable, + 4dBu or -10dBV
Digital input	A/D Converter	24 bits resolution, 96kHz sampling rate
	Format	AES (110 Ohms with transformer)
	Connector	XLR
Internal section	Sampling rates	44.1 ; 48 ; 88.2 or 96kHz (automatic detection)
	Processing	Internal DSP
	D/A Converter	24 bits resolution, 96kHz sampling rate
Dynamic range	> 110dB	
Amplification		
LF stage	Class D / 250W rms	
MF stage	Class D / 150W rms	
HF stage	Class AB / 100W rms	
Interface		
System control	Switchable between	Serial RS-232 (PC/Mac) MIDI
Power supply	Mains voltage	230V (3.15A fuse rating) 115V (6.3A fuse rating) IEC inlet and detachable power cord
User controls and indicators		
Hardware controls	Analog input sensitivity switch Left / Right AES channel selection switch System control source (Interface) switch	
Software controls	Output level, Sweet Spot, "Shelving" EQ , General EQ, Presets, Delays	
Indicators	Power on LED, Infra-Red reception LED	
Transducers		
Woofer	"W" cone, long excursion Focal 11W5551B, 10 ^{5/8"} (27cm) driver	
Passive radiator	"W" piston, extra wide surround Focal 11WPP51, 10 ^{5/8"} (27cm) radiator	
Midrange	"W" cone Focal 6W0451, 6 ^{1/2"} (16.5cm) drive unit with push-pull Neodymium magnet	
High frequency	Focal TBUSM11 Beryllium dome tweeter with Focus Ring magnet	
Shielding	Integral through cancellation magnets / cans or by magnet design	
Cabinet		
Construction	7 ^{1/2"} (19mm) and 9 ^{13/16"} (25mm) MDF panels with internal braces	
Finish	Slate grey metallic lacquer on side panels Dark red veneer on top / bottom, corners in stained solid wood	
Dimensions (H x L x D)	13 ^{5/16} x 18 ^{1/8} x 13 ^{3/4"} (338mm x 460mm x 350mm)	
Weight	55lb (25kg)	

The technical specifications of these products may be modified.