

## Focus Modular

# **DFM-100**

Active high frequency module with Beam Steering, 8  $\times$  1" compression driver















### Focus Modular DFM-100

DFM-100 is an active high frequency module with Fohhn Beam Steering technology. It can be flexibly combined with the low-mid modules DFM-400. The new generation of our renowned Focus Modular system is now fully digitized and provides further developed Fohhn DSP and digital signal connections. Acoustically redesigned and equipped with even more powerful drivers, DFM delivers excellent, audiophile sound and best speech intelligibility. A high-quality and high-performance solution for larger conference rooms, theaters and even open-air concerts. And all of this with an enclosure that is just about 22 cm wide and can be flown straight and integrated seamlessly thanks to beam steering.

#### Main features

- 8 × 1" compression drivers with 1.75" voice coil, hornloaded with waveguide
- 8 integrated class-D amplifiers
- Optimized Fohhn DSP structure inside
- Fully digital signal flow from input to amplifier
- Q-SYS Plugin available in combination with Fohhn NA-4 or ABX-
- Max. SPL single module: 142 dB (102 dB @ 100 m)
- Vertical dispersion controlled in real time via Fohhn Audio Soft
- Vertical beam width: 0° to 90°, sound inclination angle: -40° to +40° (adjusted in 0.1° increments)
- two separate beams can be controlled
- Fohhn Side Lobe Free Technology
- Easy rigging thanks to the Fohhn Quicklock System

Available with the following color options



Equipped with the following Fohhn technologies



Fohhn Beam Steering Technology



Fohhn Airea



Fohhn DSP inside



Flyable product



Special colors optional



Auto Power

Possible input interfaces for this product

AES/EBU

**AIREA**°

### **Technical data**

#### **Electroacoustic features**

electronically steerable line array speaker
8 × 1" (1.75" VC) compression drivers hornloaded waveguide design
142 dB (102 dB @ 100 m)
active, 8-channel DSP-amplifier, Class-D
1.7 kHz – 16 kHz
90°
0° – 90° in 0.1° increments
-40° – +40° in 0.1° increments
0% (bottom) to 100% (top) movable, both beams
multiplex birch playwood, Aluminium
224 × 700 × 274 mm
25 kg
textured paint / powder coating, black
hexagonal perforated steel grille in enclosure colour, backed by acoustically transparent foam
steel grille, ball impact resistant, powder-coated
integrated flying tracks, 4 × M8-threads at rear
RAL Classic / NCS / Pantone on request

optional colours RAL C	Classic / NCS / Pantone on request

#### **CAAD** simulation data

simulation data	EASE, Fohhn Designer	
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#### **Electronic features**

amplifier type	Pure Path Digital PWM
audio inputs	AES/EBU
audio outputs	AES/EBU
amplifier power	8 × 120 W
DSP channels	8
frequency response	20 Hz – 20 kHz
signal/noise ratio	>105 dB/A
auto power save	adjustable from 1 s to 12 h, or never active
protective circuit	soft start, overtemperature, short circuit, overload
power supply	100 V – 240 V AC 50/60 Hz, power supply with Power Factor Correction (PFC)
inrush current	7,5 A (230 V) / 3,8 A (115 V)
power consumption	300 W RMS, idle 15 W, standby 5 W
heat dissipation	70 W, 239 BTU/h, 60 kcal/h
temperature range	0 – 40°C
cooling	temperature-controlled fan
weight (electronics)	3 kg

#### Controller

digital signal processors	2
independent limiters	6
FIR filter	yes
gain	-80 dB – +12 dB
EQ	10-band parametric EQ, gain, +/-12 dB, frequency 10 – 20 kHz, Q 0.1 – 100
selective 3-band limiting	bass / mid / high
limiter / compressor	yes
noise gate	yes
delay	input: 0 – 350 ms (0 – 120 m); output: 0 – 640 ms (0 – 220 m)
X-over	Linkwitz-Riley 4th order (24 dB / octave), high pass 10 Hz – 20 kHz, low pass 10 Hz – 20 kHz
system latency	1.2 ms
band-specific time constants	yes
filter technology	80-bit double precision
input	AES/EBU 32 kHz – 96 kHz, 16/24 bit
input DSP processing	yes

#### Remote control and remote monitoring

remote control	Fohhn Audio Soft, Fohhn Net
remote monitoring	temperature, protect, signals, power supply, Fohhn Net, Fohhn Audio Soft
simulation beam	Fohhn Net, Fohhn Audio Soft

#### Connections and controls

controls	mains switch (remote-controllable via Airea Connect)
mains connection	1 × PowerCON mains in, 1 × PowerCon mains out
inputs	1 × etherCON Airea Connect / stack link, 1 × XLR AES/EBU, 1 × etherCON Fohhn Net
outputs	1× etherCON stack link, 2× XLR AES/EBU, 2× etherCON Fohhn Net
signal inputs	AES/EBU 32 kHz – 96 kHz, 16/24 bit
signal outputs	AES/EBU link-out from input

#### **Display LEDs**

Sign LED (connector panel and front grille)	blue = power on, blue flashing = sign
status LED	green = ready, red = protect / standby, red flashing = fault
receive / send LED	receive / send remote control LED
audio error LED	red = no AES/EBU
remote power LED	green = Airea Connect active, remote power on
on (stack link) LED	green = stack link active

power rating (peak); maximum SPL: peak, 20 ms with bandpass filtered pink noise signal according to IEC 60268-2 at one octave above the lower limit of the frequency range, with speaker preset

frequency range: -10 dB under anechoic halfspace-conditions with speaker preset

weight: net weight without optional equipment heat dissipation: pink noise, 6 dB crest, 1/4 Pmax

nominal dispersion: -6 dB compared to the main dispersion axis

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