

# TOURING & INSTALL

2018-2019



# Horizon

Vertical Horizontal Line Array

14



**VHA-F 406 Code 41779**  
Flying bar for vertical configuration  
HORIZON VHA 406 A



**VHA-F 406-1 Code 41780**  
Flying bar for horizontal configuration  
1x VHA 406 A



**VHA-F 406-5 Code 41781**  
Flying bar for horizontal configuration for 2-5 HORIZON VHA 406 A



**VHA-B 406 Code 41783**  
Metal base to ground VHA 406/VHA 112 array and stack on VHA 1185A



**VHA-T 406 Code 42126**  
Trolley for 3 x VHA406/VHA112 and metal base to ground 4x VHA406/VHA112



**VHA-S 406 Code 41782**  
Cluster bracket with speaker pole for 1x VHA 406A



## Horizon VHA 406A

VERTICAL HORIZONTAL ACTIVE LINE ARRAY  
600W + 300W - 133 DB SPL

- Bi-amplified 2-way line array
- 4 x 165mm (6.5") custom woofers with 38mm (1.5") coil
- Large format FBT waveguide with 90° (H) x 20° (V) dispersion
- Frequency response from 65Hz to 20KHz
- **Class-D 600Wrms for LF and 300Wrms for HF amplifiers** with switch mode power supply
- DSP processor with 8 equalization presets
- Control panel with XLR input and link, volume, presets, filter-HP, ground-lift
- **Neutrik PowerCON TRUE1 IN and LINK power connectors**
- Cabinet in 12mm (0.5") birch plywood with anti-scratch varnish. Handles with rubber inserts and **rubber-coated sides** to protect the cabinet from bumps and scratches.
- Side suspension hardware with integrated setting pins, inclination between adjacent cabinets from **5° to 20° in 5° steps**. Possibility of **vertical and horizontal installation through dedicated flybars**.
- Wide range of accessories for suspension, pole-mounting or ground-stacking.
- Ideal for both live applications, assisted by one or both subs of the VHA range, and for fixed installations



## Horizon VHA112SA

VERTICAL HORIZONTAL ARRAY ACTIVE SUBWOOFER  
1200W - 135 DB SPL

- **Bass-reflex amplified subwoofer**
- **320 High-excursion 320mm (12") Woofer B & C**
- **1200Wrms class D amplifier** with switching mode power supply
- DSP processor with 8 presets, delay
- Control panel with XLR input and link, volume, presets, delay, low extension
- **Neutrik PowerCON TRUE1 IN and LINK power connectors**
- Cabinet in 12mm (0.5") birch plywood with anti-scratch varnish. Handles with rubber inserts and **rubber-coated sides** to protect the cabinet from bumps and scratches
- **Ideal for reinforcing and extending the low range of the VHA406A line array**



## Horizon VHA1185A

PROCESSED ACTIVE SUBWOOFER  
2500W - 143 DB SPL

- **Bass-reflex amplified subwoofer**
- **460mm (18") high excursion woofer B&C with 100mm (4") coil**
- Frequency response from **30Hz to 100Hz**
- **2500Wrms class D amplifier** with switching power supply
- DSP processor with 6 presets, 6-step delay
- Control panel with XLR input and stereo link, volume, presets, delay, status led
- **Neutrik PowerCON TRUE1 IN and LINK power connectors**
- Box in **18mm (0.7") birch plywood** with anti-scratch varnish
- Two M20 stand sockets and 4 FBT aluminum handles, predisposed for 4 x 100mm (4") swivel casters
- **Integrated mechanics compatible with VHA406A and VHA112SA for ground stack configurations.**
- Extremely robust grid with protective fabric
- Ideal for reinforcing and extending the low range of the VHA system



## FBT LOOKS TO THE HORIZON WITH NEW VERTICAL HORIZONTAL ARRAY

Developed to meet the increasingly diverse needs of rental companies and systems integrators, the **HORIZON VHA (Vertical Horizontal Array) series** by FBT is set to rewrite the rules of sound reinforcement system design when it debuts at Frankfurt Pro Light + Sound 2018.

Delivering optimal audience coverage with the ability to adapt to the requirements of the project at hand, **HORIZON VHA** represents a step forward in flexible sound reinforcement technology with exceptional sound quality.

Crafted in Italy with the no-compromises manufacturing excellence for which FBT is known, the HORIZON VHA series comprises the full range **VHA406A**, plus two options for low-end extension in the shape of the **12" VHA1125A and 18" VHA1185A**.



VHA 406A x 3  
VHA 1125A  
VHA-T 406



VHA 406A x 2  
VHA 1125A  
VHA-B 406  
VHA 1185A



VHA 406A  
VHA-S 406  
VHA 1185A



VHA 406A/  
VHA 1125A max 3  
VHA-T 406



VHA-FH 406-1  
VHA 406A

Constructed in birch plywood with a tough and tour-ready synthetic rubber surround, each **VHA406A** comprises **four 6.5-inch woofers plus a 1.4" large-format neodymium compression driver with a 2.5" voice coil**. The purpose-designed central waveguide, optimized with BEM finite element simulations, offers dispersion of **90° horizontal and 20° vertical**, with precise and focused vertical control across the enclosure's entire operating range. The result is a combination of perfectly balanced, symmetrical dispersion – multiple system can be coupled with full coherence far beyond 18KHz, plus a particularly powerful, defined midrange with a frequency response extending from **65Hz to 20KHz**.

The **VHA406A's Class-D**, switch mode amplifier module is constructed in die-cast aluminum with natural convection to deliver **600W for the LF** section and **300W for the HF**. Courtesy of an integrated DSP processor with next generation algorithms, users can choose from eight presets to further tailor system performance whilst enjoying the system's tremendous headroom to ensure the best possible audio fidelity. Integrated hardware allows the linking of up to six **VHA406A** cabinets with variable angles from **5° to 20° (in 5° steps)**, ensuring an easy and error-proof system configuration and set-up. Rigging is simplified even further by the inclusion of only one setting point per side. All setting pins are fixed and integrated into the hardware, eliminating both the risk of loss and damage in transport.

Crucially, the **HORIZON VHA** system also boasts integrated quick-release anchor points that facilitate the creation of horizontal arrays using the dedicated flybar. Each flybar will



support up to three **VHA406A** cabinets, while multiple flybars can be joined for the creation of arrays delivering up to **360°** coverage.

For low-end extension, meanwhile, the **VHA1125A flyable bass-extension module** is ideal for small-to-medium sized projects, seamlessly matching the **VHA406A** in both size and shape yet housing a single **12" B&C long excursion woofer**. The bass reflex design incorporates a laminar air flow to minimize turbulence and compression, while the **Class-D** amplifier module drives the system with **1200W**, and includes on-board DSP with filtering, equalization and limiting.

For larger spaces, the ground-stacked **VHA1185A** is an **exceptionally powerful and versatile subwoofer** that sets a new standard for SPL to size ratio. Comprising a single **18" B&C woofer**, the birch plywood, bass reflex sub again deploys a laminar air-flow for refined performance, while its **2500W Class-D amplifier** module offers a selection of six entirely rewritten preset algorithms.

The design of the **VHA1185A** has produced a unique low-end module that is capable of generating extremely high levels of SPL for prolonged periods. Using BEM finite element simulations, FBT has optimized the woofer's load volume, while careful study of the grille and the assembly's protective fabric have minimized acoustic impedance for a net improvement in performance compared to previous models. The addition of the **VHA1185A** extends the overall system frequency response to 30Hz, while the sub can support fully ground-stacked configurations thanks to the dedicated accessory.



Model	VHA 406A	VHA 1125A	VHA 1185A
Configuration	way 2 REFLEX	1 REFLEX	1 REFLEX
Built-in amplif. max. LF/HF	W RMS 600 / 300	1200	2500
Built-in amplif. max. peak LF/HF	W 1200 / 600	2400	5000
Frequency response	@ 6dB 65Hz - 20KHz	preset dependant	preset dependant
Low frequency woofer	inch 4x6.5 - 1.5 coil	1x12 - 3 coil	1x18 - 4 coil
High frequency driver	inch 1x1.4 - 2.5 coil - neodymium	-	-
Maximum SPL cont/peak	dB 128/133	131.5/135 half-space	137/143 half-space
Dispersion	H x V 90 x 20	omnidirectional	omnidirectional
Input impedance	KOhm 22	22	22
Crossover frequency	kHz 1.2	preset dependant	preset dependant
AC Power requirements	VA 640	640	650 (1/4 max pwr)
Input connectors	XLR with loop	XLR with loop	XLR with loop
Power cord	m / ft 5	5	5
Net dimensions (WxHxD)	mm 612x360x397	612x360x397	606x700x720
	inch 24.1x14.2x15.6	24.1x14.2x15.6	23.8x27.5x28.3
Net weight	Kg/Lb 31/68.3	26/57.3	65/143.3
Transport dimensions (WxHxD)	mm 720x410x515	720x410x515	700x897x800
	inch 28.3x16.1x20.3	28.3x16.1x20.3	27.5x35.3x31.5
Transport weight	Kg/Lb 33/72.7	28/61.7	75/165.3