

# K&F SPECTRA 212 XW with VariQ Technology



- Convertible Line Array Speaker
- Compact three-way, high-performance top with patented VariQ Technology
- Variable useable as Line- and Point-Source
- Exemplary coverage angle for precise work
- High output (138 dB) at low weight (48 kg)
- Operation with K&F SystemAmps



The K&F SPECTRA 212 XW is a compact, three-way, high-performance top that provides very high performance with the best possible dispersion in a compact form factor. Thanks to the integrated K&F VariQ technology, the K&F SPECTRA 212 XW can be used as a line array, or line source cluster and as a stand-alone point source speaker. To this end, the patented K&F VariQ unit is rotated 90° in just a few steps to switch between point source and line source operation. In line source operation, the box can be set up as a horizontal cluster or hung one below the other as a line array.

The absolutely exemplary radiation behaviour in both operating modes makes the K&F SPECTRA 212 XW ideal as a tool for demanding sound reinforcement tasks, especially in acoustically difficult environments. The three-way system features two 12" woofers in a bass-reflex cabinet, six 5" mid-range speakers in a closed cabinet, and four 1" compression drivers on a K&F Waveformer. The result of this assembly is an extremely distortion-free reproduction in the entire frequency spectrum. The K&F SPECTRA 212 XW is powered by the proven K&F SystemAmp power amplifiers. They equalise the box with two amp channels, which ensures the best possible performance and reliability.

The design of the K&F SPECTRA 212 XW provides a sonically impressive experience. All details of the source material are transmitted to the audience transparently and in detail. The large dynamic range and very high achievable levels allow for versatile applications. From small club gigs to large sound systems – the system's sound remains absolutely neutral in every situation.

With its compact dimensions and low weight of 48 kg, the K&F SPECTRA 212 XW can easily be put into operation by two people. The size and weight of a box correspond to about half of classic horn systems, while the acoustic output is the same. The required truck load volume is thus reduced by almost 50 % with the K&F SPECTRA 212 XW.

In point-source mode, a K&F SPECTRA 212 XW emits 120° horizontally and +5/-25° vertically. This makes it possible to use a K&F SPECTRA 212 XW as a single high performance top. The asymmetrical vertical radiation facilitates alignment with the audience and reduces unwanted ceiling reflections. Optionally, the VariQ can also be used with upward asymmetric radiation + 25° / -5°.

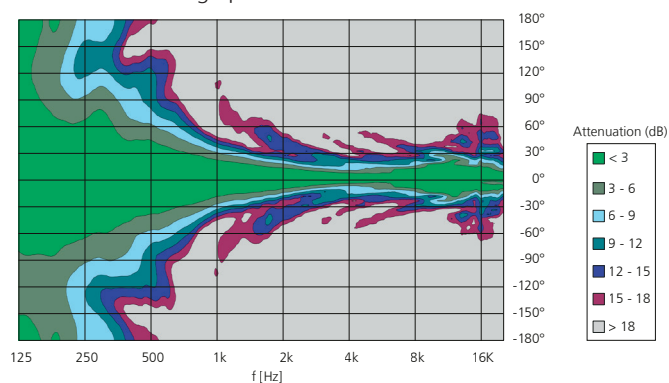
In line-source mode, a K&F SPECTRA 212 XW emits 30° horizontally and 120° vertically. With the housing angles and the integrated and unobtrusive connection mechanism, arrays of up to six K&F SPECTRA 212 XW units can be horizontally clustered and flown. The system adapts to the requirements, depending on the desired coverage and maximum sound pressure.

## K&F SPECTRA 212 XW with VariQ Technology

<b>Design</b>	Passive 3-way system, 2-way active equalized, LF bass reflex, MF Closed, HF waveformer horn loaded
<b>Operation with</b>	K&F PLM+ Series, K&F D Series (recommended) K&F SystemRack (supported)
<b>Frequency Response ±10 dB</b>	Full Range: 56 Hz – 20 kHz Low Cut: 83 Hz – 20 kHz
<b>Frequency Response ±3 dB</b>	Full Range: 65 Hz – 18 kHz Low Cut: 125 Hz – 18 kHz
<b>Nominal Coverage Angle (H x V)</b>	Line Source: 30° x 120° Point Source: 120° x +5°/-25° Convertible trough rotation of the VariQ unit
<b>Nominal Power Handling</b>	2 x 500 Watt
<b>Program Power Handling</b>	2 x 1.000 Watt
<b>Peak Power Handling</b>	2 x 2.000 Watt
<b>Maximum SPL (Peak @ max. 10% THD)</b>	Point Source: 138 dB SPL 1 x Line Source (30°): 140 dB SPL 2 x Line Source (60°): 142 dB SPL 3 x Line Source (90°): 143 dB SPL 4 x Line Source (120°): 144 dB SPL
<b>Nominal Impedance</b>	2 x 8 Ω
<b>Loudspeaker/Channel</b>	2 recommended, max. 3 per channel
<b>Components</b>	2 x 12" LF, 6 x 5" MF, 4 x 1" HF
<b>Connectors</b>	speakON NL4 (1+/1- LF + HF // 2+/2- MF)
<b>Enclosure</b>	Frame-reinforced 15mm Multiplex enclosure with 30° angle for ideal cluster setups with highly resistant Polyurea synthetic coating in black, convertible between line source and point source through rotation of integrated VariQ unit, integrated flying track system, ergonomic handles on top and bottom for horizontal and vertical transport, sunk-in connector panel, 4 non-abrasive plastic sliding feet on bottom, ball proof steel grille with black acoustic foam behind the grille.
<b>Dimensions (W x H x D)</b>	460 x 800 x 460 mm
<b>Weight</b>	48 kg
<b>Colour</b>	RAL 9005 (black)

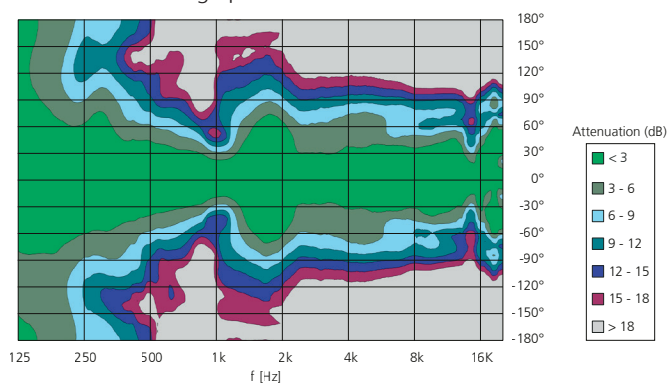
## SPECTRA 212 LINE SOURCE

### Horizontal coverage pattern

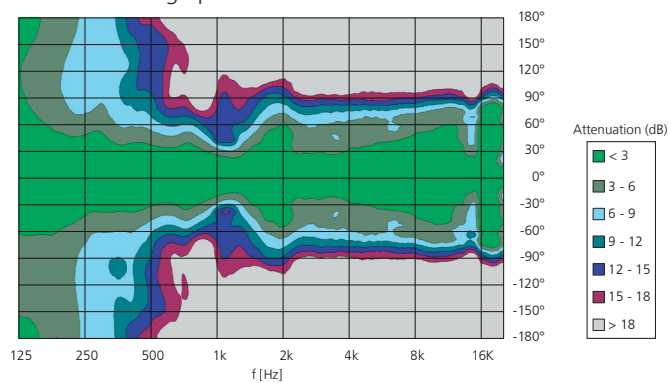


## SPECTRA 212 POINT SOURCE

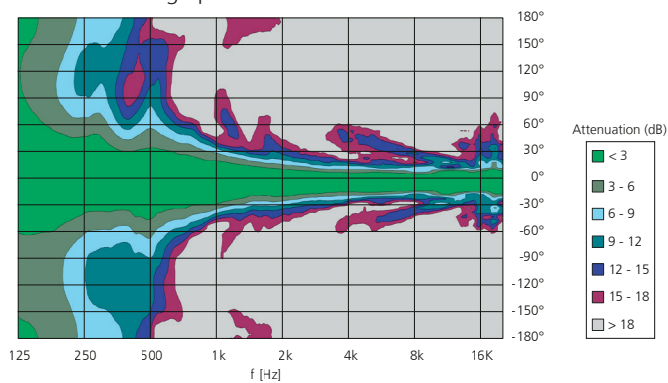
### Horizontal coverage pattern



### Vertical coverage pattern

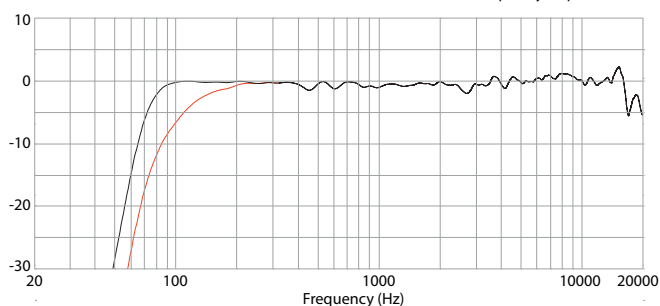


### Vertical coverage pattern



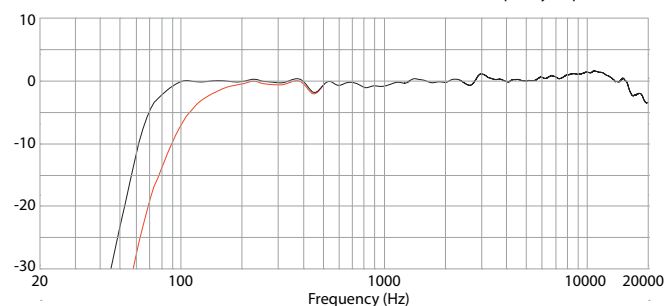
### Frequency response 'on axis' Line Source

— Frequency response  
— Frequency response LCut

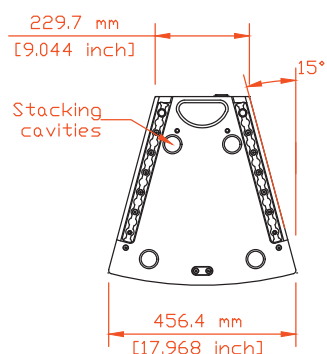
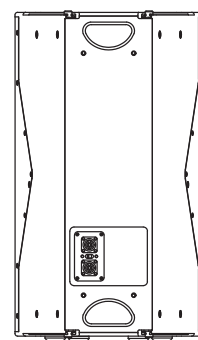
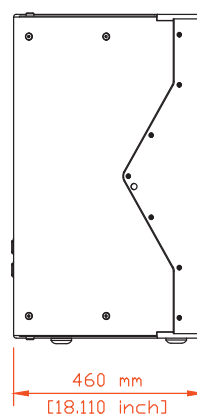
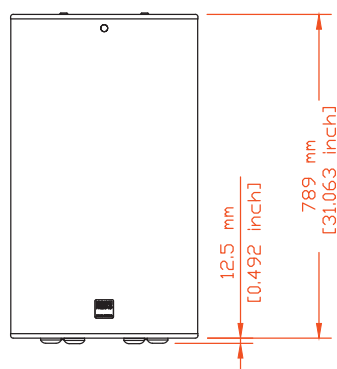
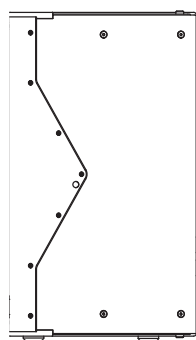
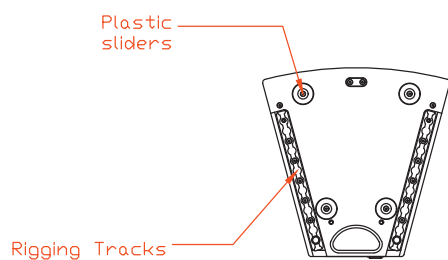


### Frequency response 'on axis' Point Source

— Frequency response  
— Frequency response LCut



# K&F SPECTRA 212 XW with VariQ Technology



Further information and data like specifications, manuals, technical drawings as DWG, DXF and PDF files as well as data files for acoustic simulations with Ease and Ulysses are available on our web site [www.kling-freitag.de](http://www.kling-freitag.de)

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