## K&F SPECTRA 212i XW with VariQ Technology



- Convertible Line Array Speaker
- Compact three-way, high-performance top with patented VariQ Technology
- Flexible useable as Line- and Point-Source
- High directivity and pattern control
- High output (138 dB) at low weight (48 kg)
- Operation with K&F SystemAmps



The K&F SPECTRA 212i 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 212i 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.

The absolutely exemplary radiation behaviour in both operating modes makes the K&F SPECTRA 212i 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. As a result, the design of the speaker allows for an extremely distortion free sound reproduction over the entire frequency spectrum. The K&F SPECTRA 212i XW is powered by the proven K&F SystemAmp power amplifiers. Two processed amp channels are used to drive the speaker, which ensures the best possible performance and reliability.

The design of the K&F SPECTRA 212i 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.

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

In line-source mode, a K&F SPECTRA 212i XW emits 30° horizontally and 120° vertically. With the housing angles and the connection mechanism horizontal and vertical arrays can be formed, as well as point source clusters. The system adapts to the requirements, depending on the desired coverage and maximum sound pressure.

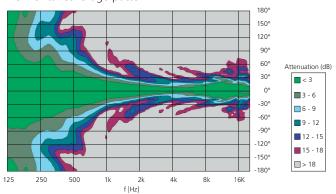
| K&F SPECTRA 212i XW with VariQ Technology |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design                                    | Passive 3-way system, 2-way active processed, LF bass reflex, MF Closed, HF waveformer horn loaded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Operation with                            | K&F PLM+ Series, K&F D Series                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                           | (recommended)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                           | K&F SystemRack (supported)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Frequency Response ±10 dB                 | Full Range: 56 Hz – 20 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                           | Low Cut: 83 Hz – 20 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Frequency Response ±3 dB                  | Full Range: 65 Hz – 18 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                           | Low Cut: 125 Hz – 18 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Nominal Coverage Angle                    | Line Source: 30° x 120°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (H x V)                                   | Point Source: 120° x +5°/-25°                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                           | Convertible trough rotation of the VariQ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Name of Barrey Harry History              | unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Nominal Power Handling                    | 2 x 500 Watt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Program Power Handling                    | 2 x 1.000 Watt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Peak Power Handling                       | 2 x 2.000 Watt                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum SPL                               | Point Source: 138 dB SPL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| (Peak @ max. 10% THD)                     | 1 x Line Source (30°): 140 dB SPL<br>2 x Line Source (60°): 142 dB SPL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                           | 3 x Line Source (90°): 143 dB SPL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                           | 4 x Line Source (120°): 144 dB SPL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Nominal Impedance                         | 2 x 8 Ω                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Loudspeaker/Channel                       | 2 recommended, max. 3 per channel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Components                                | 2 x 12" LF, 6 x 5" MF, 4 x 1" HF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Connectors                                | speakON NL4 (1+/1- LF + HF // 2+/2- MF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Enclosure                                 | speaker: 12: (1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/2 1:1/ |
|                                           | 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, 40 M8 mounting points for dedicated accessories, ball proof steel grille with acoustic foam behind the grille.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Dimensions (W x H x D)                    | 460 x 800 x 460 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Weight                                    | 48 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Colour                                    | RAL 9005 (black)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                           | RAL special colour upon request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |



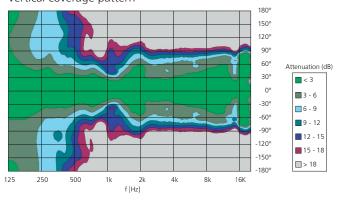
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### **SPECTRA 212 LINE SOURCE**

#### Horizontal coverage pattern

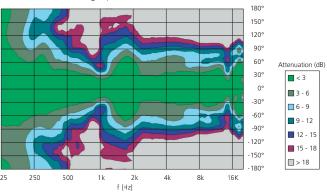


### Vertical coverage pattern

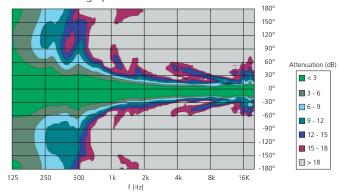


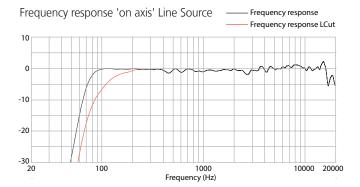
### **SPECTRA 212 POINT SOURCE**

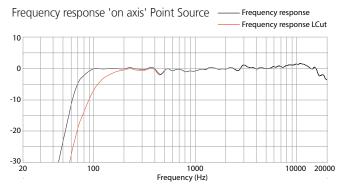
#### Horizontal coverage pattern



### Vertical coverage pattern







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