

# PIEGA Master Line Source



The ideal of the perfect loudspeaker.



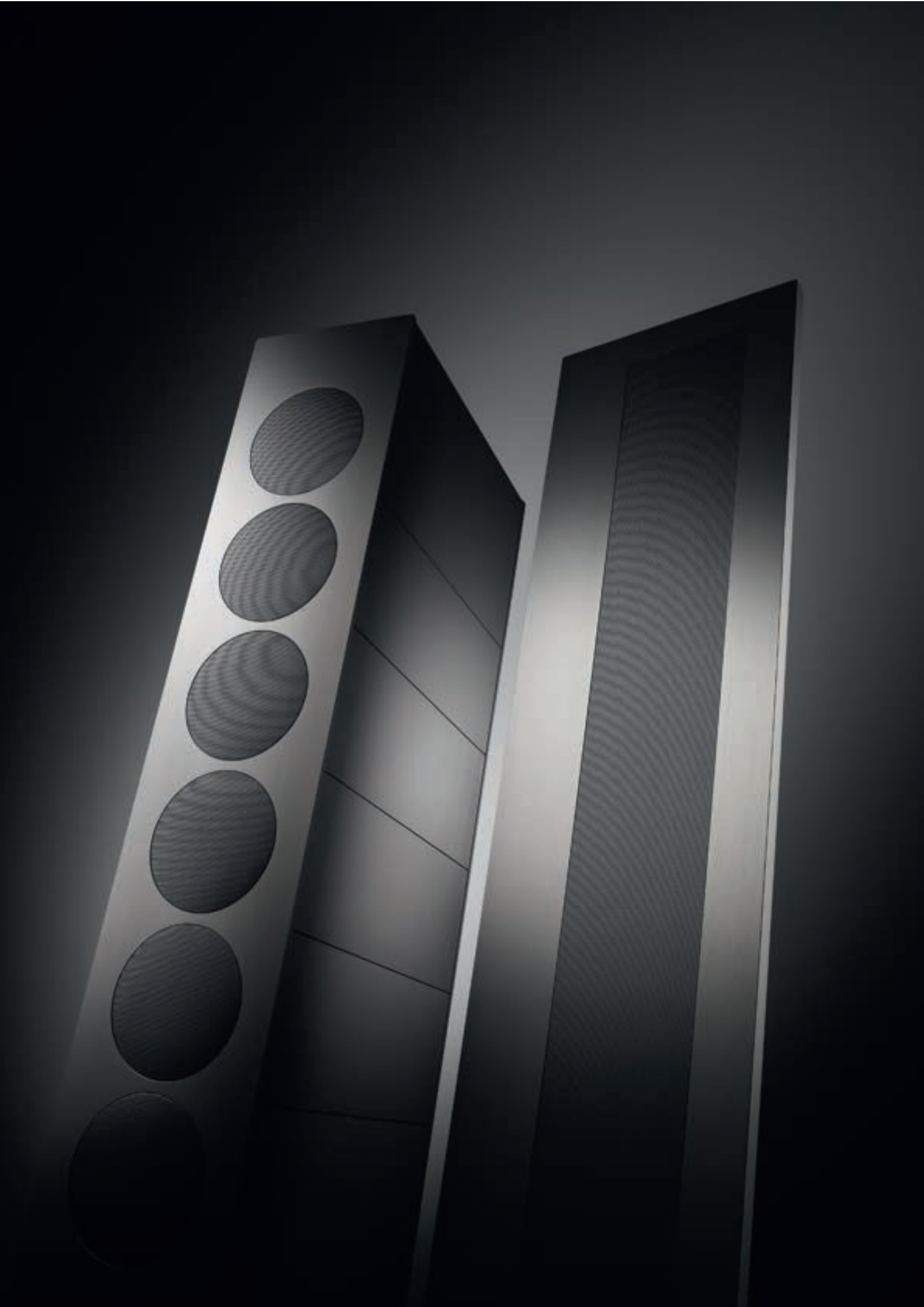
## PIEGA Master Line Source

Music lovers who know the Swiss loudspeaker manufacturer well know that development manager Kurt Scheuch can neither rest on his laurels nor leave exciting developments to rot in a drawer. His ambitions of achieving an even more lifelike and natural sound quality remain completely unchecked. Now and then, however, it requires a very special impulse to allow an idea which has been slow-cooking in the back of the head to become reality. In this case it was several people who all have close connections with the music world in different ways. A famous US band who paid a visit to PIEGA during the annual jazz festival in Montreux, some international specialist dealers who were inspired by the exquisite sound of the elegant loudspeaker models during demonstrations in the PIEGA listening room, and finally several hi-fi journalists with whom Kurt Scheuch has continuously been in touch and has been talking with about sound, acoustics and technology. They all had the same idea: «Kurt, why don't you crown your successful life's work with the ultimate super-loudspeaker?»

This was a question with consequences. As we know, Kurt Scheuch was always enthusiastic about innovation and high technical performance. Right at the beginning of the development of his high-end loudspeakers, he followed the concept that the perfect loudspeaker ought to represent an infinitely small punctual sound source. This ideal concept was immaculately realised by PIEGA with the coaxial ribbon systems, since here not only the high-frequency range but also the entire mid-frequency range is radiated along the X, Y and Z axes from the same point.

A second approach describes the so-called line source as the ideal sound transducer. In the case of the line source, all frequencies are radiated as coherent cylindrical sound-waves - a principle for which the PIEGA ribbon loudspeaker technology would be eminently suitable. Kurt Scheuch started to get uneasy: could this combination perhaps be the foundation for a completely new product idea?

His deliberations continued. Since the scale of distortion in a loudspeaker increases linearly with the deflection of the membrane, the line source, whose sound-producing surface is considerably larger than in the case of conventional loudspeakers, only produces extremely low distortion. In other words, a line source with several ribbon loudspeakers would have an unbelievable sound potential which has not been implemented up to now.



# Development and loudspeaker construction

The new super-loudspeaker started to take shape. Several years of development followed until the PIEGA Master Line Source was able to celebrate its premiere in autumn 2013. In Kurt Scheuch's masterpiece, 24 ribbon tweeters, nine ribbon mid-range speakers used as a dipole and six 22 cm bass speakers are used. Logically, all non-linearities are reduced by an appropriate factor. This is a ground-breaking advantage, which can immediately be seen in an increased purity of the sound image and literally explosive dynamics while listening.



The structural implementation of the Master Line Source is based on the system of a dipole emitter. In order to implement the acoustic qualities without compromise using the driver's high quality and lack of distortion, considerable importance was placed on lack of vibration in the housing. The entire mid-high-frequency panel baffle has been milled out of a solid aluminium block and shows impressive stability and damping. The aluminium block consists of a special alloy with the highest possible strength and internal damping, and has been annealed to be tension-free in an additional long-winded process. The entire milling process for the baffles was carried out on a five-axis CNC milling machine over many hours. This is the only way to achieve the required precision. The large-volume bass tower is constructed out of solid panels, and stiffened in an extremely complex manner. In order to increase the stiffness and damping,

additional aluminium panels and Idikell bitumen composite panels were applied during a compound process.

In addition to enormous development and optimisation effort, all materials and dimensions were elaborated in meticulous precision work to provide the best possible transmission quality. This was the ideal basis for designing the crossovers. Since no errors or temporal differences need to be compensated for during sound transmission, the filters are stable and sound reproduction takes place at the highest possible level.



The fine-tuning of the system also required considerable time, and PIEGA's entire know-how was used for it. The limits of the system were extended again and again during long hearing sessions. The concept of the Master Line Source has an unbelievable potential, and the aim was to exploit the facilities for a «door into new sound worlds» as fully as possible.

The results of many years of work speak for themselves. Absolute high-fidelity reproduction without limits, a chronologically coordinated festival for all senses or, to put it another way, musical naturalness which makes one speechless.

# Swiss craftsmanship for a maximum of hearing pleasure

The Master Line Source can only be produced by one person, a long-standing member of the PIEGA crew who works with painstaking craftsmanship. This means that there could be a waiting time (rather unusual for PIEGA) for delivery of this sound giant. The Master Line Source is manufactured at the company's headquarters in Horgen – in the midst of the inspiring surroundings of Lake Zürich – without haste, but with plenty of calmness, precision and huge appreciation for the product. A masterwork of loudspeaker construction manufactured by a craftsman's hand for perfect listening pleasure.

It is an absolute privilege to allow oneself to be taken away into a land of senses and relaxation with absolutely original, wonderful and crystal-clear sound. Music in perfect quality expresses what cannot possibly be said in words. Music carries us away, allows us to forget everything around us. PIEGA's Master Line Source will carry you off into a completely new acoustic dimension.

## Technical Data

Model	PIEGA Master Line Source
Design principle	3-way dipole system System loudspeaker
Recommended amplifier output	–
Sensitivity	94 db/W/m
Impedance	4 Ohm
Frequency range	–
Equipment mid-high and tweeter panel	24 pcs LDR ribbon 2642 MKII (12 pcs at front / 12 pcs at rear) 9 pcs MLS mid-range ribbon 110-100 dipole
Equipment Bass Tower	6 pcs 22 cm MOM® bass woofer
Connection	Bi-Wiring / WBT
Dimensions mid- / highrange panel (HxWxD)	175 x 44 x 3 cm
Bass Tower dimensions (HxWxD)	175 x 34 x 62 cm
System weight	420 kg
Implementation	Cabinet aluminium, loudspeaker cover in black or silver Special versions on request



# Service

PIEGA offers first-class service and six years warranty on all loudspeakers, as well as three years on the electronics.

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