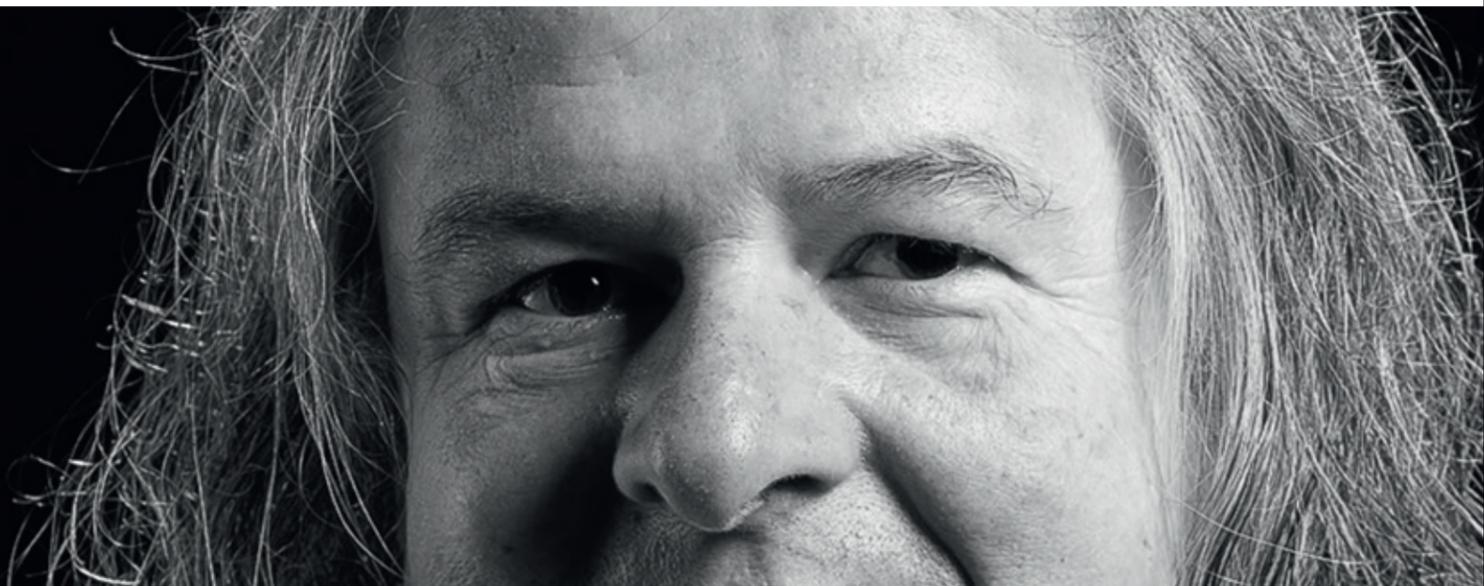




A symbiosis of modern audio technology,
excellent design and the best possible
sound quality.



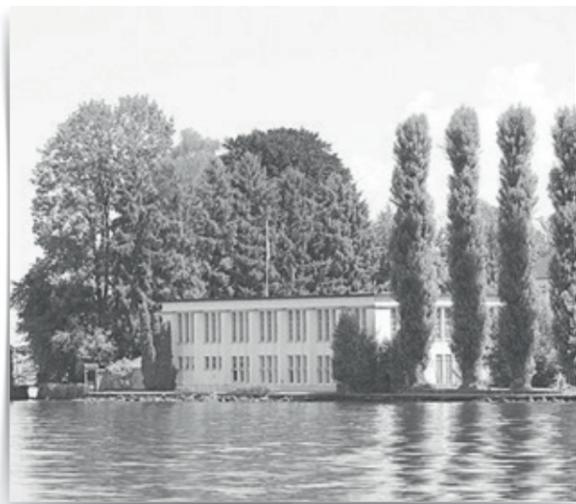


Kurt Scheuch, Company founder

Music! That, and that alone, is ultimately what a loudspeaker is all about.

For us, the best loudspeaker is one that does not intrude on the sound texture; one that introduces no sound interpretation of its own. In other words, one that renders what is played in the concert hall or sound studio as directly and naturally as possible.

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, leaving the world around us behind. Piega speakers will also carry you off into completely new acoustic dimensions.

All PIEGA speakers are produced in our factory on the banks of Lake Zürich in Horgen and Wädenswil. We manufacture all ribbon systems and perform the final assembly of the loudspeakers there. 100% handcrafted and «Made in Switzerland» are two of the essential PIEGA brand claims. We are the market leader for loudspeakers in Switzerland and today export our products to 38 countries.





Leo Greiner, Company founder

30 years of pioneering spirit, and much painstaking craftsmanship have brought us ever closer to this ideal.

Our company philosophy is to realise the best possible sound quality by uniting cutting-edge audio technology with excellent design. Loudspeakers from PIEGA are a joy for both eye and ear. A logical functionality determines their simple, sleek and elegant styling, a hallmark of the renowned and award-winning Swiss star designer Hannes Wettstein.



Allow me to take a look at the major milestones in the PIEGA story: in 1996 PIEGA was founded by me, Leo Greiner and Kurt Scheuch. From the beginning, there was the use of our own PIEGA ribbon tweeters. In 1997, PIEGA introduced the world's first extruded aluminium profile for the cabinet construction. Three years later – another worldwide exclusive – the first coaxial ribbon system. Enormous developer expertise was used in creating the PEIGA-exclusive subwoofers with MDS and MOM technology, first presented in 2006. In 2009, we unveiled the first dipole emitter with a coaxial ribbon system. Still used to this day, the LDR 2642 MKII ribbon tweeters came out in 2011, and the most recent highlight in the PIEGA story is the presentation of the Master Line Source in Autumn 2013.





Technological highlights:

1. Ribbon tweeter

Whereas most loudspeaker manufacturers rely upon dome tweeters for reproduction of high frequencies, PIEGA Head of Technology Kurt Scheuch was using the PIEGA model ribbon tweeter the company introduced in 1986 in the company's very first year. Because ribbon speakers have an extremely light membrane made of a thin folded or embossed aluminium foil, they can reproduce high frequency impulses much faster and more directly than conventional domes. Even the company name refers to this chassis technology: «La piega» meaning «fold» in Italian. Over the past nearly 30 years, the PIEGA tweeter has been further developed and can now be found under the name LDR 2642 MkII in all speakers in the Premium series.

2. Midrange ribbon

In the 90s PIEGA expanded its chassis range to include a midrange ribbon specialized in reproduction of the midrange. Starting at 500 Hertz, compared to the ribbon tweeter, significantly larger foil speakers enter into the acoustic moment. Its powerful neodymium magnet and the excellent physical properties left the professional world speechless at an exceptionally airy and spacious sound. Today the pure midrange ribbon is no longer used – but lives on as part of the PIEGA coaxial ribbon system.

3. Coaxial ribbon

In 2000 PIEGA succeeded in fusing tweeter and midrange ribbons in one unit. PIEGA introduced the world's first coaxial midrange/tweeter ribbon! In the larger design, this cutting-edge technology is called C1 and is used to this day in the top models of the Coax series. Two years later, a more compact version of the coax driver called C2, which is found today in the smaller coax models.

4. Aluminium cabinets

Aluminium cabinets not only make for a very elegant and sleek speaker design, but also significantly reduce the cabinet dimensions necessary for a voluminous bass reproduction. Hence PIEGA proved itself to be a true pioneer from the start for transducers made from this unique material and shows throughout its entire range of products just how sonorous and powerful relatively compact speakers can be.





Excellent sound quality

In addition to the exceptional design and the innovative technologies of PIEGA loudspeakers, one thing must not be forgotten: their excellent, widely praised and out-

standing sound quality. The short quotes on the following pages are from publications in the trade media from the past four years.

stereoplay

«For anyone who loves music and enjoys richness of detail but is not willing to buy big speakers for big sound, the Piega is spot on.»

(Stereoplay 4/2012 on the Coax 90.2)

«The grip, the airiness of good recordings, in short: the enjoyment in experiencing music – that's what Piega offers to a significantly greater extent.»

(Stereoplay 9/2009 on the Master ONE)

Home electronics

«For the suggested retail price, the new Piega sounds simply sensational in terms of neutrality, fine and coarse dynamics and resolution.»

(Home Electronics 11/2012 on the Premium 5.2)

«The Master ONE sounds amazingly different to conventional, only frontally emitting boxes: freer, more detached, more light-hearted. It handles any kind of music with the greatest of ease, yet orchestrates it in an emotionally gripping and haunting way.»

(Home Electronics 9/2009 on the Master ONE)

AUDIO

«The Coax 30.2 belongs amongst the ranks of the subtlest transducers – fascinating in all tonal and spatial fine values.»

(Audio 11/2012 on the Coax 30.2)

AREA DVD

«The two TMicro 3's sound neutral, fresh and natural. Dimensionality, perfect accuracy with the baserange and liveliness in the overall presentation, makes you want to straightaway set up the noble system right in your sitting room.»

(areadvd.de in July 2011 on the TMicro 3 with TMicro Sub)

STEREO

«As a team, the Piega trio appealed, beyond its successful design, with a harmonious, thoroughly audiophile-inspired sound image, with fresh, impulse-accurate and clear contrast.»

(Stereo 8/2013 to 3 TMicro with TMicro Sub)

«The coax system, in forming an acoustic centre in the tweeter and midrange, delivers tangible vividness, seamless dynamic contrast and homogeneity. World class!»

(Stereo 8/2009 on the Master ONE)

av magazin.de

«The acoustic breadth and depth surprises with a volume that one would not have believed a loudspeaker of this size capable. Kudos!»

(av-magazin.de in the August 2013 edition on the TMicro 4)

FIDELITY

«The audible result is so convincing that most commonly stocked speaker looks quite old in comparison. Particularly in terms of the fine dynamics Piega here catapulted far forward.»

(Fidelity 4/2013 on the Coax 120.2)

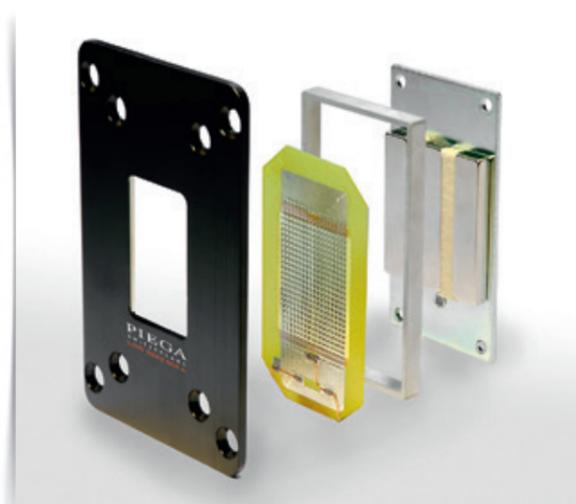
The Premium and TMicro product lines won the PlusXAwards for high quality and design.



PIEGA ribbon tweeter

In the very year it was founded in 1986, PIEGA presented its first proprietary-designed ribbon tweeter. It made a great wave in the industry. It has since been continuously developed and is used today in all loudspeakers of the PIEGA Premium series in what is called the LDR 2642 MKII version. With its detail and its efficiency clearly the ribbon exceeds the performance of a conventional dome tweeter.

These excellent audio properties are made possible by a 26 x 42 mm paper-thin aluminium foil membrane. The moving mass is only seven milligrams and is thus about 30 times lighter than the lightest commercially available dome tweeters. The membrane contains two flat coils that are used up using a very sophisticated spray etching technique. It is driven by a highly compressed neodymium magnet and magnetic bars built into the front panel that function as magnetic lenses. They converge the magnetic field lines, so that the tweeter has an efficiency of more than 100 dB. The audible result is a remarkably clear and extremely detailed sound, an unprecedented vitality – even at low levels – and an impulsive and clearly reproduced midrange.



The membrane foil is mounted in a glass-fibre-reinforced epoxy holder that is positioned in a subchassis made from rubber elements with high damping properties. The foil is additionally given a special embossing through a complex process that significantly increases the stiffness and internal damping without adding significant extra mass. The system can be used with as little as 3,500 Hz. Here, the distortion factor is extremely low and the cumulative decay spectrum free of any resonance.



The advantages at a glance:

- Very little moving mass
- Best impulse behaviour
- Extremely linear frequency response
- Clean decay spectrum
- High efficiency
- Low distortion factor
- Aluminium membrane made from 0.02 mm-strong foil with only 0.007 grammes of moving mass
- Frequency response up to 50,000 Hz; efficiency 100 dB

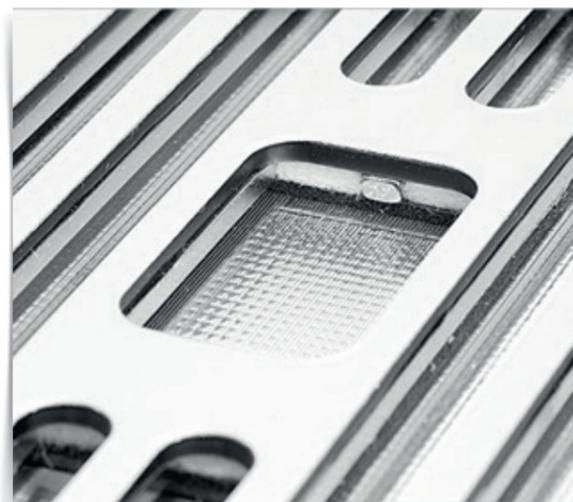


PIEGA coaxial ribbon

PIEGA's coaxial ribbon system is the uncompromising successor of the midrange and ribbon tweeter. It combines for the first time all the advantages of the coaxial transducer arrangement in a ribbon system.

The special feature of this system is the fact that the membrane of the tweeter is surrounded by the membrane of the midrange. The two membranes are therefore on the same plane and have the same spatial point as the acoustic centre. The result is a perfect addition of the individual frequency ranges. Thereby the system has a nearly perfect impulse response, which is not «shrouded» by the components of the indirect sound. The resulting resolution is of an unprecedented clarity.

The rectangular membrane used in the midrange consists of a very light, but stable aluminium foil only 0.02 mm thick. Its dimensions ensure excellent emitting properties and make it usable at as low as 400 Hz. Extremely strong neodymium magnets provide the drive. An efficiency of more than 100 dB guarantees considerable dynamic reserves and an animated sound quality even at low levels.



The tweeter is located at the centre of the midrange membrane. Its key design features are based on the legendary PIEGA LDR ribbon tweeter described on page 10. Its dispersion response harmonises perfectly with the midrange frequency.

The advantages at a glance:

- The tweeter and midrange membranes are located on a plane in all three axes = a single acoustic centre
- True point source
- Lively sound
- No phase shifts
- Includes all the advantages of the LDR ribbon tweeter
- Coaxial ribbon system(tweeter/midrange):
 - 0.02 mm aluminium foil
- Frequency response from 400 Hz up to 50,000 Hz; efficiency > 100 dB





PIEGA aluminium cabinets

As to be expected from PIEGA, the visual appearance of the loudspeaker is characterized by the wonderful timeless elegance typical of Hannes Wettstein. The aluminium cabinets we use suit any surrounding and reflect perfection impressively.

The ideal speaker cabinet should be absolutely free from any vibration and intrinsic resonance. Therefore it is extremely important that a perfect cabinet have very great stiffness and very high internal damping properties. Aluminium is an almost ideal material for answering both needs. Aluminium cabinets are much stiffer than cabinets made of MDF and with much thinner walls than wooden cabinets. In addition, aluminium loudspeakers have a much greater interior volume than a wooden speaker of the same exterior dimensions. This makes for relatively small speakers with a «big» sound.

The cabinets are extruded from a 3 tonne aluminium block by a press weighing 7,500 tonnes. The cabinet with trapezoidal, triangular or C-shaped floor plan combines great stiffness, unhindered sound radiation and the absence of any resonances. The baffle for our MasterONE is made from a solid aluminium block with a high damping core, the individual cabinet parts are made of a three tonne aluminium block and the subwoofer cabinet is made of aluminium plates that are laser-welded together with



absolute precision. The sophisticated strutting and the use of special bitumen-composite materials applied proportionally to the cabinet wall thickness are important design factors in the realisation of the acoustically perfect cabinet. PIEGA was the first manufacturer to produce cabinets made of aluminium and now has more than 15 years of experience in building aluminium loudspeakers. This also explains its technological edge over its competitors.

The facts at a glance:

- All PIEGA loudspeakers are made in aluminium
- Pressed with a 7,500 tonne press out of 3 tonne block of aluminium
- Production in a single production step
- Outstanding cabinet stiffness through an optimal cabinet wall : IDIKELL damping material ratio.
- Acoustically ideal cabinet styles
- Shapely floor plates with excellent stability, top with shadow gap

Note:

With its CLASSIC line coming out in 2014, PIEGA will be bringing several speaker models with conventional wooden cabinets to the market for the first time. Two reasons led to this decision: firstly PIEGA wished to show how well the unique chassis technology of the PIEGA ribbon comes into play even in comparatively inexpensive speaker models, whilst also impressively proving with the CLASSIC Line how fantastic and compelling the sound quality is of their technically similar but dramatically more compact sister models with aluminium housings.



PIEGA Master Line Source – the ideal of the perfect loudspeaker

PIEGA Head Developer Kurt Scheuch has always been fascinated by innovation and technological high-performance. His conviction that the perfect speaker must represent an infinitely small point source, led to the coaxial ribbon system that radiated not only the high frequency range, but also the entire mid-high range on the X-, Y - and Z- axis from the identical point.



Another approach describes the so-called line source as the ideal 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. Furthermore, since the degree of distortion increases linearly with the deflection of the membrane on each loudspeaker, the line source (whose sound-producing surface is considerably greater than with conventional speakers) exhibits only extremely low distortion.

Thus the idea was born to combine both approaches and to develop one line source with several ribbons.

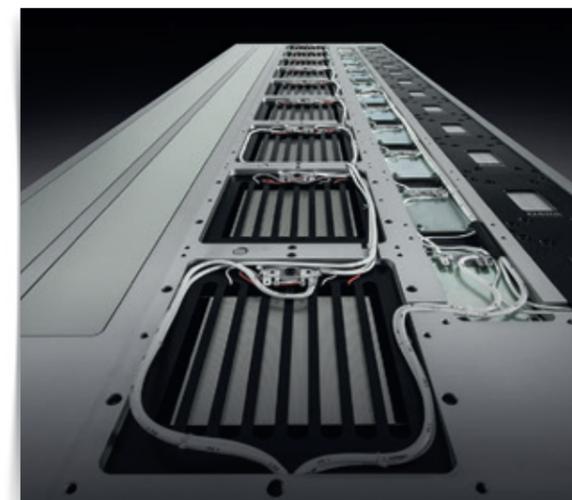


The aluminium block consists of a special alloy with the highest possible strength and internal damping, and is additionally annealed in an hours-long process in order to be tension-free. The entire milling process for the baffles is carried out on a five-axis CNC milling machine lasting many hours. This is the only way to achieve the required precision. The large-volume bass tower is constructed from 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 are applied during a compound process.

In several years of development, the PIEGA Master Line Source was born, whose tweeter/midrange panels were ultimately each equipped with 24 ribbon tweeters and nine used as a dipole ribbon midranges and in each of whose subwoofers six 22 cm basses are used.

The structural realisation of Master Line Source is based on the principle of the dipole emitter. In order to implement the acoustic qualities without compromise using the drivers' high quality and lack of distortion, considerable importance was placed on lack of vibration in the cabinet. The entire mid-high-frequency panel baffle has been milled out of a solid aluminium block and shows impressive and damping.



The acoustic fine-tuning of the system also took a vast amount of time into which the entire sum of the PIEGA expertise was poured. The limits of the system were extended again and again during long listening sessions. The Master Line Source is made with exacting craftsmanship by a longstanding member of the PIEGA crew. At the company's headquarters in Horgen, absolute masterpieces of loudspeaker design are thus created for perfect listening pleasure.

PIEGA MasterONE: First dipole loudspeaker with coaxial ribbon system.

After extensive studies, calculations, tests and a few sleepless nights, the development of PIEGA MasterONE was completed in spring 2009. We have managed to combine the uniqueness of the world's first coaxial ribbon system and the essential elements of the slender tower speaker in an effectively dipole emitting system, thus setting a new milestone in the history of loudspeaker design.



PIEGA Coax Series: Reference class with coaxial ribbon system.

Flawless sound image from the highest to the deepest tone, speed, simultaneous transmission of all frequencies – these are the outstanding attributes of the Coax high-end series. All models are produced in our studios in Horgen und Wädenswil with the utmost craftsmanship and are acoustically adapted and rigorously tested before leaving our house for the big wide world. The coaxial ribbon system, which is used in all Coax models, ensures the highest possible sound quality and simultaneous perception of both high and mid-range frequency transmission. The Coax series is a guarantee for sound and pure enjoyment!



PIEGA Premium Series: Loudspeaker with LDR ribbon tweeter.

All Premium models are fitted with the newly-constructed PIEGA LDR 2642 MKII ribbon and play the high-frequency range with a fine, silky and crystal-clear sound. This new tweeter is the logical further development of the legendary LDR ribbon. For the MKII model, many new materials and design features from the coaxial converters are applied. The whole Premium model range of 50.2, 5.2, 3.2 and 1.2 is now being built in the aesthetically appealing C-shaped cabinets. The successful result of our work is a fantastic improvement in every technical discipline, but also a considerable step forward in terms of sound. The bass chassis, which uses MDS® technology to ensure a voluminous bass power, has also been further developed.

Premium models with PIEGA ribbon tweeters are available in various sizes, from the small 30 cm high compact loudspeaker up to the meter-high column. That there is in the series of two centre loudspeakers in different sizes makes the Premium series particularly attractive to multi-channel lovers.



PIEGA TMicro Series: The clever space-saving series.

Despite minimal dimensions, the new TMicro series loudspeakers will amaze you with an emphatic richness of sound. In conjunction with the classic aluminium cabinet, neodymium dome and precision-tuned crossover, we have built a speaker, which is able to play music even with minimal dimensions as a stand-alone converter with brio.



PIEGA AP: Sonorous compact speakers for universal use.

Idiosyncratic but sophisticated and precisely calculated shapes coupled with selected technology, characterize the AP series loudspeakers. The advantages of the AP 3 lie in its universal applicability. It can be used as stereo loudspeaker, as surround and as centre speakers and acoustic irradiation of large locations. Whether mounted vertically, horizontally or on the ceiling - AP 3 radiates from all directions without any loss in quality. In surround mode, true theatre-like experience is guaranteed when combined with an active PS 1 or PS 2 subwoofer! A simple wall holder has been developed especially for this series for wall or ceiling mounting. It can hardly be seen, and can also be aligned to the required level.



PIEGA Subwoofer: Fascinating playback of the bass range.

To truly enjoy the full bass range spectrum, the use of a subwoofer is a must. It is responsible for low-frequency sound waves playback and handles the emission of the lowest bass frequencies in both home theatre and stereo systems. The terminal fields of PIEGA PS1 and PS2 models offer numerous connection options for stereo systems with separable full amplifiers or pre/power amps and surround sound systems with AV receivers. And in addition to an amp for the built-in woofer, the subwoofer from the TMicro Series even comes with two more power amps for the direct control of two stereo satellites.



PIEGA Classic Series

It was almost 30 years ago that the first PIEGA loudspeakers came into existence at Horgen on the shores of Lake Zurich. Four timelessly beautiful loudspeakers which – very unusual for the time – celebrated their première in standard perfect piano black. The quartet was fitted with innovated chassis and the first LDR ribbon tweeter designed and made by PIEGA. Over the next decades, the PIEGA company developed these roots to become the leading builder of ribbon tweeters and coaxial mid-high range systems, known as well as for its use of seamlessly made aluminium cabinets.

The newest of the PIEGA loudspeaker family forge a link to the company's beginnings: The PIEGA Classic Series is an homage to the origins of the Swiss audio specialist. The three differently sized floor speakers refer in style and materials to its history and allow lovers of loudspeakers with a classic appearance to also have access to the unique and internationally leading PIEGA ribbon technology.

The distinguishing features of the new loudspeaker trio are the refined wooden cabinets which can be selected in piano white or black finish or high-gloss, polished Makassar veneer. The elegantly rounded bodies facing toward the back are pressed in a C-shape and document the relation to the similarly formatted aluminium series Coax and Premium. The baffle and the forward-leaning top section are covered with Napalette, which gives the Classic models a very unique visual note. In addition, the cabinets, with extensive interior reinforcement, Idikell sound absorption and 25 mm thick walls, are optimised for excellent bass reproduction without any disturbing vibration or resonance.

PIEGA SA
Bahnhofstrasse 29
CH-8810 Horgen
Phone +41 44 725 90 42
Fax +41 44 725 91 92
mail@piega.ch
www.piega.ch

Information for exports
PIEGA SA
Bahnhofstrasse 29
CH-8810 Horgen
Phone +41 44 725 90 02
Fax +41 44 725 91 92
mail@piega.ch
www.piega.ch

