

## S O U N D P R O J E C T S

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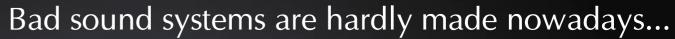


YOUR DEALER

# S O U N D P R O J E C T S











# Convenience

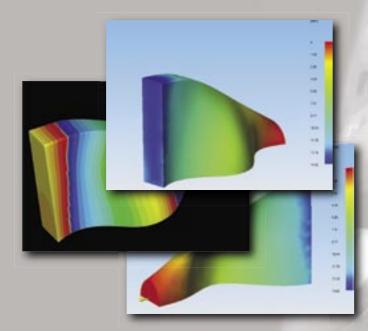


The blessings of line array technology come with the time saving convenience of a single self-powered box.

Twelve line array modules accompanied by dedicated electronic speaker management and abundant amplifier power merged in one elegant cabinet:

A concept that conveniently evades labour intensive complexities and expensive hardware.

#### THE "ACOUSTIC BACKBONE"



The Sound Projects Wave-shape-transformer™ is the "acoustic backbone" that reshapes the spherical uni-phase wavefront generated by a low compression HF driver to a near plane cylindrical wavefront. A tangible and patented result of creativity, wavefront propagation analysis, acoustic simulation software and FFT measurements.

In each DreamLine<sup>TM</sup> twelve Wave-shape-transformer<sup>TM</sup> exits are symmetrically flanked by 24 bass drivers and mutually loaded by twelve constant directivity horns. This tight configuration vastly improves 'acoustic coupling' and balanced loading of the three separate sources. The long vertical transducer now evolved, yields extremely tight pattern control and negligible destructive HF interaction.

#### THE ELECTRONIC GAIN CHAIN



The electronic Gain Chain delivers reliability due to proven  $\eta$ -max technology, Dual Audiologic Level Control (DALC) and multiple MICRO-AMPs

 $\eta$ -max (eta-max) is a proprietary low-noise gain structure from input XLR to speaker terminals.  $\eta$ -max virtually eliminates disturbing hiss or hum. The inaudibly gain riding DALC and filters control each of the four 600 W MICRO-AMP's maintaining the tonal balance of each Dreamline (2.4 kW Class D in HP versions)  $\eta$ -max effectively prevents excessive speaker excursion, burned coils and amplifier clipping.

Sophisticated So undreinforcement

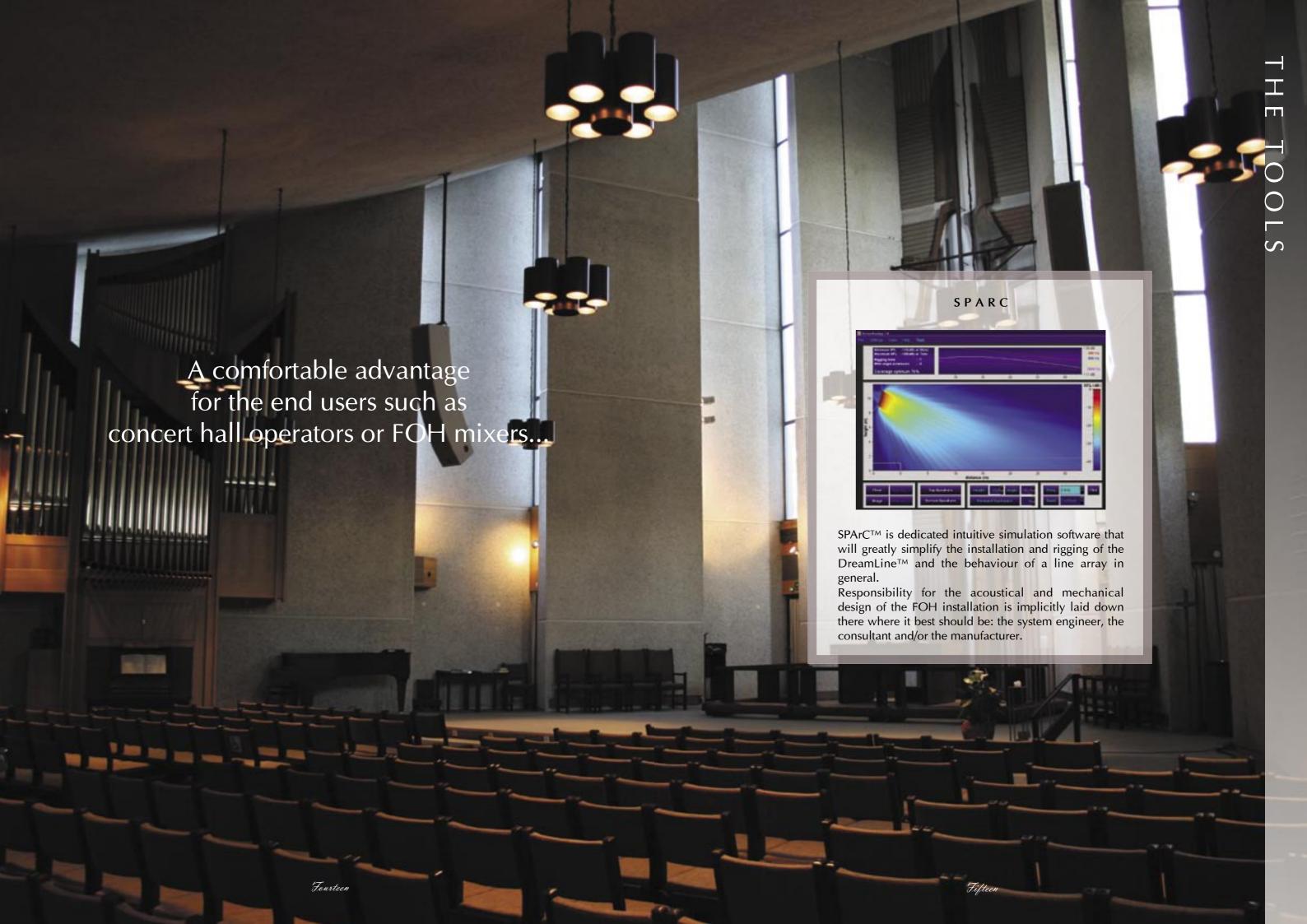
The distinguished shape of the DreamLine™ is an emulation of the acoustic wavefront generated by all transducers in common.

A curved shape optimised for smoothest coverage that neatly seals in all the advantages of a line-array. Science became a sophisticated function of form.





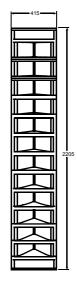


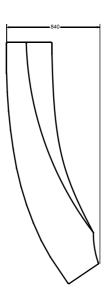


#### DreamLine™





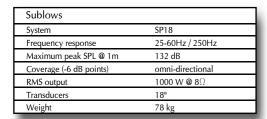


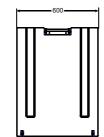


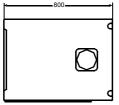
DreamLine Light	DreamLine Touring	DreamLine Fixed	DreamLine High Power	BassLine
35Hz-20kHz	35Hz-20kHz	35Hz-20kHz	35Hz-20kHz	60-90/140Hz
132 dB	138 dB	138 dB	144 dB	136 dB
90 H x 40 V	90 H x 40 V	90 H x 40 V	90 H x 40 V	omni-directional
4 x Micro AMP*	4 x Micro AMP*	4 x Micro AMP*	2 x Micro AMP* + 2 x classD**	3 x Micro AMP*
24x6.5" / 12x1"	24x6.5" / 12x1"	24x6.5" / 12x1"	24x6.5" / 12x1"	6x12"
125 kg	120 kg	122 kg	130 kg	105 kg
	35Hz-20kHz 132 dB 90 H x 40 V 4 x Micro AMP* 24x6.5" / 12x1"	35Hz-20kHz 35Hz-20kHz 132 dB 138 dB 90 H x 40 V 90 H x 40 V 4 x Micro AMP* 4 x Micro AMP* 24x6.5"/12x1" 24x6.5"/12x1"	35Hz-20kHz       35Hz-20kHz         132 dB       138 dB         90 H x 40 V       90 H x 40 V         4 x Micro AMP*       4 x Micro AMP*         24x6.5"/12x1"       24x6.5"/12x1"	35Hz-20kHz       35Hz-20kHz       35Hz-20kHz         132 dB       138 dB       138 dB       144 dB         90 H x 40 V         4 x Micro AMP*       4 x Micro AMP*       2 x Micro AMP* + 2 x classD**         24x6.5"/12x1"       24x6.5"/12x1"       24x6.5"/12x1"       24x6.5"/12x1"

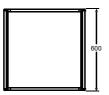
#### SP18













New materials and design refinements are introduced into existing products without previous notice. As a logical consequence, present SOUND PROJECTS systems may differ in some respect from those presented in this brochure. Copyright 2010 SOUND PROJECTS. All rights reserved. Pictures courtesy of PAP Stavanger(N), Eurogress Aachen(D), PSK Brussels (BEL), Artez Arnhem (NL), Mediaworks Augsburg (GER), Musis Sacrum (NL), ASL Mechelen (BEL), Children of the Khmer Edinburgh (UK)



### FREQUENTLY ASKED QUESTIONS

Why a line array to begin with?

Because a long vertical sound source narrows the vertical radiation pattern!

Already in 1938 The Radio Corporation America (RCA) developed a first vertical array column loudspeaker system to increase SPL plus improve control on the radiation pattern. Some 50 years later high power, high frequency ribbon speakers and different variations on emulating such a ribbon transducer became available!

An important step forward for large-scale sound reinforcement and a new opportunity to reintroduce serious quality full band column speakers. Provided that they are of significant length, these arrays can substantially reduce the vertical spill above 100 Hz.

Why should a Dreamline be more economic than multiple cabinets?

A DreamLine<sup>TM</sup> needs no system alignment, no controller adjustment, no amp racks and no expensive rigging hardware for twelve consequentially heavy cabinets.

The DreamLine<sup>TM</sup> is but a +/- 130kg featherweight with a single point rigging and a typical installation time of 5 minutes. Since each individual DreamLine array module is carefully aimed, a stable listening image all over the audience is possible in any hall or flying position. Specific SPL needs can be met with several combinations of drivers and amplifiers which are also available as retrofit at a later stage. Hence redundancy is virtually eliminated

Why is low frequency pattern control so important?

Because disturbing room resonances mostly occur in low frequencies.

Echo's and unintentional reverb are destructive enemies of music as well as speech intelligibility. Larger public buildings with hard surface walls, ceilings and floors will exhibit several seconds of reverb. Often peaking between 100 to 500 Hz. Annoying slap echo's from the wall faced by the loudspeaker system may even run up to 2 kHz.

The length of the DreamLine™, i.e. tight vertical control plus the horizontally constant directivity horns each loading a woofer pair, significantly confine these room effects.

Why only one box with one shape?

Because the curve is dictated by the desired SPL balance between far and near audience.

Assuming a realistic length of 2 to 5 meter, any line array can only exhibit its optimum vertical constant directivity in one specific curve. All other, mechanically possible, curves will show an increased mismatch between the High and Low frequency lobes (beams). Different sound character for different audience positions and inferior speech intelligibility are the undesired side effects. Especially in large congress centres and multi purpose halls that often suffer from hard acoustics. This is the natural and inevitable compromise of a line array consisting of combined line sources. Low frequencies cannot be controlled by the curve but only by the length of the array and its flying angle.