

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

PRODUCT INFORMATION

X-ACT



SOUND PROJECTS
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X-ACT / SP15 SYSTEM

SOUND PROJECTS' X-act / SP15 system combines maximum efficiency, true versatility, compactness and expandability in an aesthetic enclosure. The X-act is designed for a wide variety of situations: from small F.O.H. system to front-fill and from floor monitor to side-fill. A single stack set-up already provides enough SPL for a few-hundred-headed audience.

The X-act can immediately be recognised by its perfect voice reproduction. This because the human ear is extremely sensitive to deviations in this vital part of the frequency spectrum.

Master Blaster's philosophy to provide systems with virtually flat frequency response enables the sound engineer to create his/her specific sound with minimal effort. For most programme material the power balance between one X-act and one SP15 sub-low will be just right, although for many acoustic performances and solo singers the X-act will do as stand-alone. Apart from taste this is of course largely dependent on programme and venue.

The advantages of self-powered system design are constantly employed to achieve maximum efficiency through optimal cooperation of the different components, e.g. speakers, horns, filter electronics.

Ease of use has been a key feature in all SOUND PROJECTS designs. Therefore nothing but the necessities are employed in a SOUND PROJECTS system. True PLUG AND PLAY without crash sensitive hardware, often found in digital equipment. Minimal cabling, no

complimentary control units, and virtually no equalising are necessary.

The X-act Mounting Bracket is designed in compliance with the German BGV C1 rules for the prevention of accidents and can hold a cabinet in a variety of angles.

To guarantee utmost reliability and noiseless (hiss free) operation each driver of the X-act system is powered by its dedicated 300W η -max[®] power amplifier. This unique and proprietary design is an integrated combination of amplifier, filter section and protection circuitry.

The X-act cabinet is based on a 1" and a 10" mounted on a shared wave-guide. The cabinet design plays an important role minimising sound coloration in the "speech-band". State-of-the-art computer aided modelling techniques and acoustic calculation programs dictated rounded cabinet shapes, manifold reinforcing ribs and no parallel surfaces.

Despite of the wide horizontal dispersion the X-act is capable of generating an impressive 120dB SPL continuous.

The SP15 is a port loaded design incorporating a proprietary 15" long excursion drivers that can make the same volume displacement as conventional 21" drivers and yet generate the punch of a 15".

The specially shaped port enables the SP15 to achieve 123dB SPL continuous over the frequencies ranging from 30-80 Hz.

η -MAX[®] POWER AMPLIFIER CONTROL MODULE

η -max[®] power amplifier control module

The η -max[®] power amplifier module incorporates power supplies for the controllers and η -max[®] electronics, soft power up, filter sections, two amplifiers and protection circuitry. The integral network of these different functions is designed to perform with minimal number of components yet acquiring the highest efficiency. The amplifier module is available in different main voltages (100V, 115V, and 230V)

Signal conditioning

The SALC (Single Audio-logic Level Control) audio processing unit of the η -max[®] power amplifier module incorporates multiple analogue VCA techniques with high accuracy, headroom and dynamic range. The SALC is a dual operating RMS based gain riding circuit which maintains the tonal balance of the sound as perceived by the human ear, even at very high levels. Filter peaking, which could limit headroom and often encountered with commonly used feedback-filters, is avoided through use of constant-Q filter sections.

η -max[®] power amplifiers

The bi-channel amplifier in the η -max[®] module is a low feedback, low distortion design with overheating protection. It reveals good stability upon spontaneous loads along with excellent protection handling of fast rise time signals and excessive signal conditions.

Power Supply Unit

The PSU of the η -max[®] power amplifier module comes with soft power up, to enable multiple cabinet switch-on's at once without excessive transformer inrush current.

Controls and connectors

Mains power LED indicator integrated
Protection LED indicator
Input 3 pin XLR (female), balanced
Signal thru XLR (male)
Protection circuits:
* Mains inrush current limiter
* Over-voltage protection
* Self resetting over temperature protection
* Speaker overheating and fusing current protection
* Delayed speaker switch-on

Data X-act

Amplifier(s): 2x η -max[®] technology
RMS output:
2 x 300W @ 8 ohms
Protection threshold: +4dBu
Frequency response (-3dB): 50 Hz - 20kHz
Max. SPL cont.: 120dB@1m
Calculated peak/longterm: 123dB@1m
Coverage angle: 100° H, 40° V
Drivers: 10", 1"
Transient output: 325W
Crossover 4th order: 1600Hz
Low-pass 4th order: -
Filter subsonic: 50Hz, 4th order
Filter ultrasonic: 20.000Hz 1st order
Mains voltage: 210 - 240V (50/60 Hz)
100 V, 110 V optional

Data SP15

Amplifier(s): η -max[®] technology
Rated output power:
1 x 600W @ 4 ohms
Frequency response (-3dB): 30 Hz – 80 Hz
Max. SPL continuous: 123dB@1m
Calculated peak/longterm: 126dB@1m
Coverage angle: omni-directional
Drivers: 15"
Transient output: 600W
Crossover 4th order: -
Low-pass 4th order: 80 Hz
Filter subsonic: 30Hz, 2nd order
Filter ultrasonic: -
Mains voltage: 210 - 240V (50/60 Hz)
100V, 110V optional

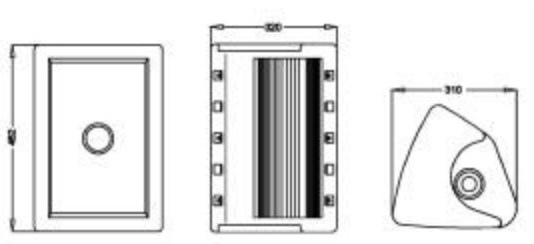
THE X-ACT LOUDSPEAKER

THE SP15 LOUDSPEAKER

X-act loudspeaker

The X-act loudspeaker cabinet is a full range, two-way enclosure holding a 10" Low/Mid driver and a 1" HF driver mounted on a proprietary, integral wave-guide that optimises the air load and smoothly blends the radiation pattern of the two transducers.

The enclosure is constructed of a fully recyclable T.S.G. structural compound. Shaped by high pressure injection moulding techniques.

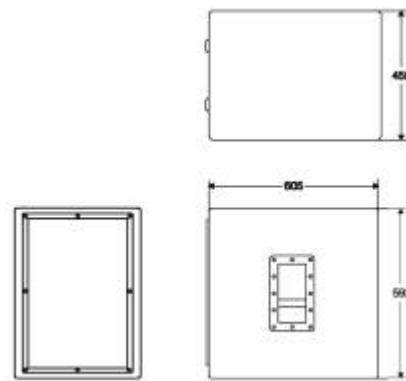


X-act, cabinet dimensions in mm.

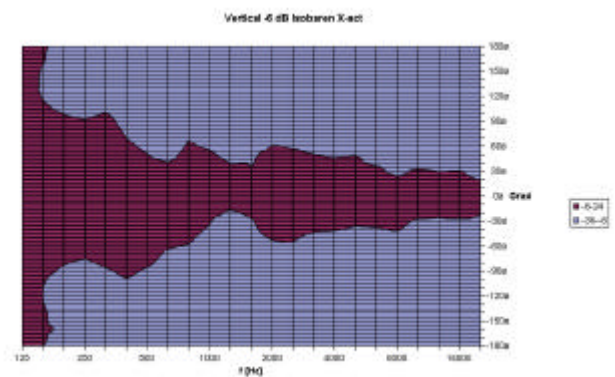
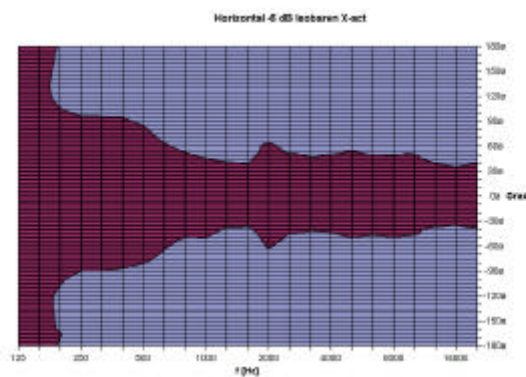
SP15 Sub-low loudspeaker

The SP15 is a solid, self-powered, sub-low in a super compact enclosure and is developed to augment and extend the low-end of the top cabinet to the deep sub you can feel. The cabinet is a bass-reflex concept containing a 15" driver powered by a 600W amplifier.

The enclosure is constructed of 13-layer birch plywood for extra stiffness and impact rigidity.



SP15, cabinet dimensions in mm.



X-act, resp. horizontal and vertical directivity plot over 180 degrees.

ACCESSORIES

An optional quick and easy, sturdy mounting bracket is available for installation of the X-act cabinet. Once attached the multipurpose Mounting Bracket can rotate to any desired position. With this flying device the X-act can be installed both horizontally as vertically, making it an ideal in-fill, side-fill, under balcony fill or stage side-scene fill.



The X-act Mounting Bracket.