

outline

KANGURO 1215 NET-SP

KANGLIRO
KANGURO



PLASA
WINNER OF THE

YESTERDAY

"THE SPEAKER WITHIN A SPEAKER"...

1998/99 The revolutionary *Volumetric Sound Series* philosophy gave birth to the most desirable object a musician or band could imagine. It's called **KANGURO**, and nothing else even vaguely resembles it. It's not a conventional product that works well and maybe even has an appetizing price - it's different.

This is a really unusual electro-acoustic contraption, based on a disarmingly simple but ingenious solution, which was the result of a design philosophy never before applied in such a way; a philosophy that was obviously patented.

Another trick thought up by the **Outline** design team which features the germ of innovation.

Never heard of a speaker within a speaker?

KANGURO is the first self-powered loudspeaker system made up of two separate units - a **satellite** and a **sub** - which fit one inside the other. The sub (the larger of the two) can physically contain the satellite, doubling as a holder for the latter, just like a baby Kangaroo is held in its mother's pouch. But only during transport of course...



Inside, the Kanguro Sub has a craftsman's finish: the carpet covering on the bracing and the sound absorbent material on the side and bottom panels ensure ideal protection for the satellite as well as acoustic performance.



HOW...?

We decided to exploit the air space necessary for the sub as "accommodation" for the satellite. This was the only way we could obtain a very small system that sounded really great (and loud!). But the fun had still to begin. Once at the concert venue, the magic takes place.

Just like matryoshka nesting dolls, **two enclosures become four**, and that's no small matter. Just a few seconds are required to open the cover of the sub, pull out the satellite, close the cover again and then aim the system at the audience. All you need is the signal and you're ready to go.

The system is ready to play - and loud too - because the Kanguro has a 1,000 Watt heart beating inside... a PWM power amplifier able to push the system up to 131 dB SPL at a distance of one metre.

All in a space of just 0.13 m³: not even half the boot of a small station-wagon... in fact... of the coolest of all "utility" vehicles (see photo).

During the show, nobody will notice this unusual procedure.

Everybody will be knocked out by the feeling of power Outline has accustomed us to.

Vocal reproduction won't be squeaky or grating... and treble notes won't pierce your eardrums: not even if you crank up the volume.

This, on the other hand, will be noticed, in a big way.

After receiving the well-deserved ovation, when it's time to dismantle the Kanguro and put back into the boot, no problem - just carry out the same procedure in reverse and once again **four enclosures become two**.

TODAY...

Continuing to build on a success lasting almost a decade, the Kanguro upgrades to achieve an even more extraordinary performance:price ratio. Its strong point - i.e. the innovative core concept of a "speaker within a speaker" remains unchanged, as does the extreme simplicity of adjustment; and then all the performance the Kanguro has always given reaches new heights:

- **its astonishing headroom**
- **its surprisingly beefy punch in spite of a volume of just 0.13 m³**
- **its hi-fi quality at over 130 dB SPL**
- **its extremely light weight: sub + sat = 42 kg (92.5 lb)**

BUT KANGURO IS NOW MUCH MORE THAN THIS...



KANGURO 1215 NET-SP

КВИЕНВО JSJ2 ИЕЛ-2Б

KEY FEATURES

- Winner of the "Design Excellence" award at London's 2001 PLASA expo
- "Plug and play" use
- Amazing headroom, 'hi-fi' sound @ 131 dB SPL, bandwidth from 37 Hz to 17 kHz
- Extremely linear frequency response and phase response of just +/-45° from 300 Hz upwards on the entire frequency band reproduced.
- PC-controllable via Outline EQ.U.I.P. software (*)
- On-board DSP, which enables 4 equalization settings to be stored (*)
- Very low weight: sub + sat = 42 kg (92.5 lb)
- Occupies just 0.13 m³: two complete systems can be easily transported in a small station wagon.
- "Stack align" system on the satellite, to increase the throw of the two enclosures when stacked and to align their emission centres.
- Patented in Italy (N° 01303453), Spain, France, United Kingdom, Germany (nationalization of European patent N° EP0991296B1) and in the USA (US7016513B2).

TECH SPECS - DIMENSIONS - WEIGHT

FREQUENCY RESPONSE	37 Hz ÷ 17 kHz (-10dB) 47 Hz ÷ 16 kHz (+/- 3dB)
AVERAGE DISPERSION	105° x 80° (H x V) 500 Hz ÷ 10 kHz 91° x 47° (H x V) > 5 kHz 105° x 98° (H x V) 500 Hz ÷ 4 kHz
INPUT SENSITIVITY	1.12 V (3.2 dBu)
POWER	2 x 500 W EIAJ 2 x 1200 W Peak
CONTINUOUS MAX OUTPUT LEVEL	124 dB SPL @ 1m (4π) 127 dB SPL @ 1m (2π)
PEAK MAX OUTPUT LEVEL	128 dB SPL @ 1m (4π) 131 dB SPL @ 1m (2π)
LOUDSPEAKERS AND LOADING	SAT: LF 1 x 12" NdFeb bass reflex SAT: HF 1 x OUT4 horn-loaded compression driver (1" throat, 1.75" diaphragm) SUB: 1x15" NdFeb bass reflex
DIMENSIONS	55 x 55 x 60 cm / 21.6 x 21.6 x 23.6 inches (H x W x D with the sat inside the sub)
WEIGHT	42 kg / 92.5 lb (with the sat inside the sub)

APPLICATIONS

Multifunction system particularly suitable for situations requiring high quality, transportability and easy fast setup. Short-throw system with wide dispersion. Ideal for "FRONT-FILL" or "DOWN-FILL" use in live applications by groups, bands and orchestras.



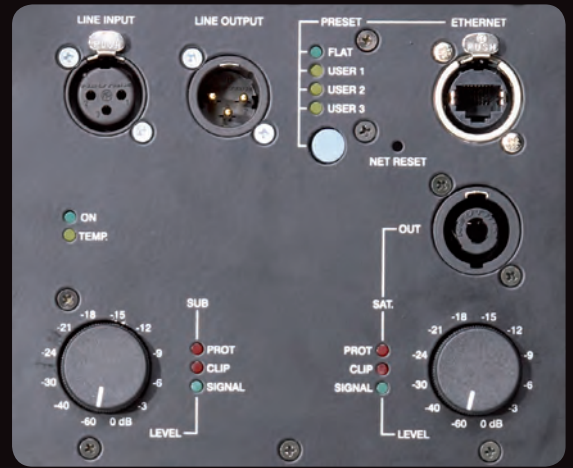
PWM POWER AMP MODULE
(500+500 W ON 4 OHM)

- ETHERNET, PRESETS, NET RESET
- LINE INPUT, LINE OUTPUT
- SYSTEM STATUS: ON, TEMP.
- OUT. LEVEL, PROTECTION, CLIP, SIGNAL
- LEVEL, PROTECTION, CLIP, SIGNAL
- FORCED COOLING SYSTEM



CONTROLLABLE WITH A PC, VIA ETHERNET

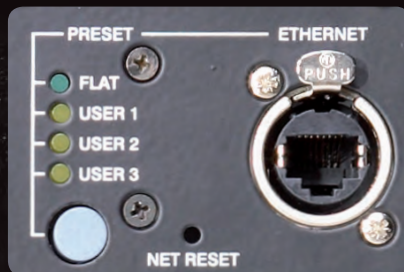
The new Kanguro fears no competition from an "IT" point of view either. Thanks to its new network card (designed entirely in Outline's in-house labs), the on-board DSP can be controlled in such a way as to exploit its capacity to the utmost. Thanks to an RJ 45 connector, it can be controlled via TCP/IP protocol. It is therefore possible to control Kanguro by means of a PC: in this case, the only limit really depends on users' fantasy. In fact the project's completed by Outline **EQ.U.I.P. (Equalization Using Internet Protocol)**, the proprietary software provided as standard, which enables a multitude of settings: ten parametric and two shelving filters, polarity control, two gain and two delay controls on output, as well as the control of a virtually unlimited number of interconnected enclosures and many other functions. (*)



NO PC? FOUR READY-TO-USE PRESETS...

There's no problem for anyone who's "allergic" to PCs or doesn't have one. To meet the most varies "acoustic requirements" we have prepared four presets (one is set as "default" by Outline, called "Flat") which can be selected

from the sub's rear panel by just pressing a key (see figure alongside). But one thing must be clear...via PC it is always possible to store a frequently used equalization curve on each key. (*)



USING PRESETS:

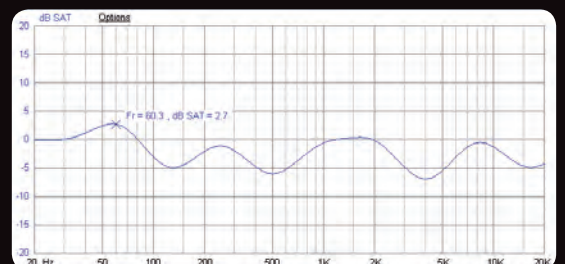
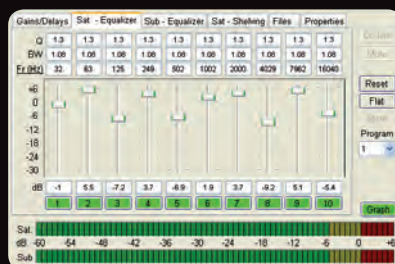
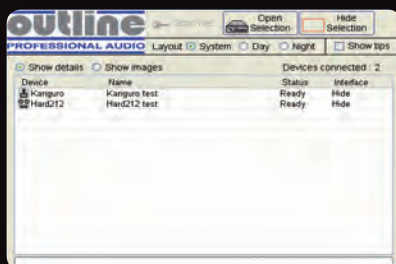
The first preset (FLAT) cannot be modified by users. The other three presets can be modified via EQ.U.I.P. - the control software supplied with the unit.

USER1: slight boost of the extremities of the band, suitable (for example) for the reinforcement of jazz or programs with low-volume listening.

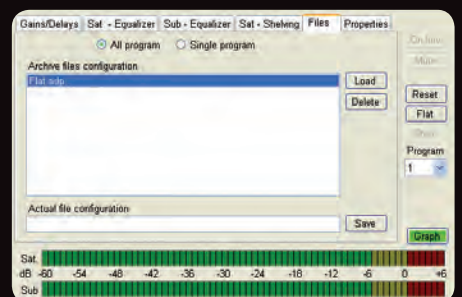
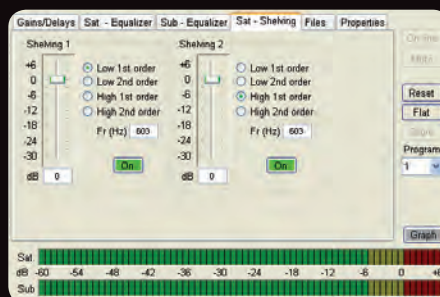
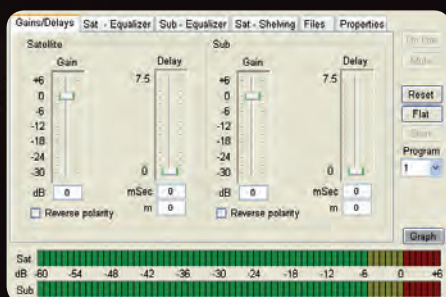
USER2: slight boost of low frequencies, suited (for example) to reinforcing rock music.

USER3: slight boost of mid frequencies for greater speech intelligibility.

OUTLINE EQ.U.I.P. EQUALIZATION USING INTERNET PROTOCOL



1. Initial window of EQ.U.I.P. software
2. Paragraphic equalizer + VU Meter
3. Bode plot; frequency response regarding the paragraphic equalizer



4. Control of levels, delay and polarity for the sub and satellite sections
5. Low/high-shelving filters
6. Control of presets on hard-disk (PC)

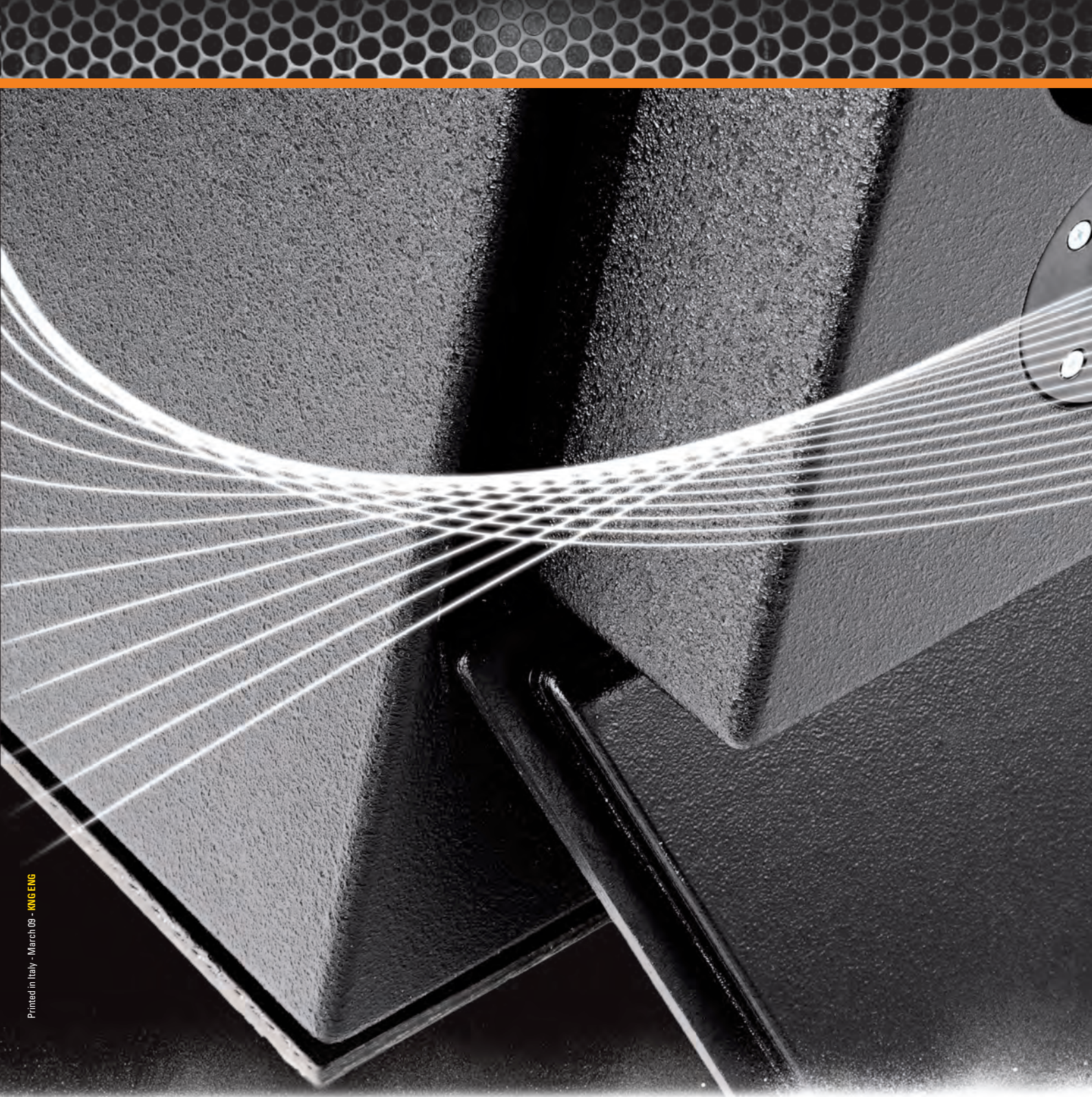
* The Kanguro system's Instruction Manual specifies and illustrates its numerous innovative functions. To obtain it: WWW.OUTLINE.IT - INFO@OUTLINE.IT

*Two Kanguro systems in the boot
of the new compact **FIAT 500**...*

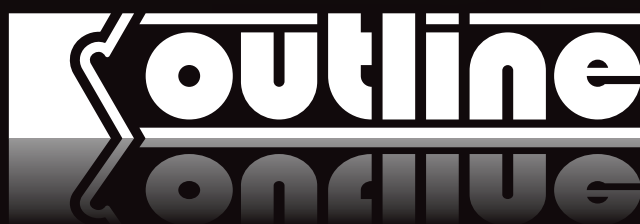


*Outline **"Stack Align" System** (supplied as standard): thanks to a steel pin, the two enclosures can be stacked to increase vertical directivity and cover long distances.*





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