



TECNARE MIDARRAY

Design philosophy



Pcc technology hardware

Since the beginning most line array manufacturer's goal has been to build a sole one cabinet model that could cope with all kind of events. Very big and heavy designs have been unable to avoid the use of extra subs, so why rig those huge systems housed with 15" and 18" if in the end extra subs, usually not hung, are required? Moreover, the technology employed brings extra on stage problems with an undesirable bass excess headroom.

Another situation, not well solved is the need of specially developed loudspeakers to cover the front fill situations. More loudspeakers have to be used, with different signal processing, so in the end we find that systems become more complex and less flexible.

To bring forward a total solution to fix all these in a simple way it's not easy, but the Tecnare MidArray has enough new solutions to clear up things and make the work of sound engineers easier.

First of all we have established a design criterion in which the size of the cabinet is extremely compact.

The bass section is conformed by one 12" driver coupled to a rear folded horn. A horn always has the benefit to better control the pattern in which the sound is projected, avoiding the headroom bass problems on stage.

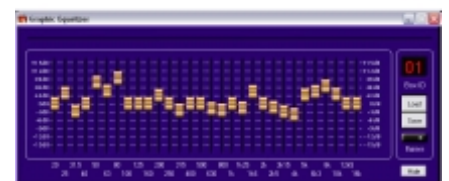
For the mid frequencies reproduction, the MidArray uses two very high output 6 and a half inch speakers, coupled to a non resonant horn.

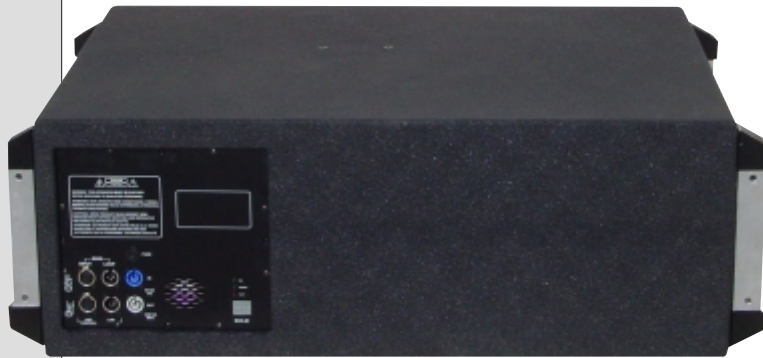
High frequency is handled by two 1.5" exit compression drivers attached to a pattern controlled (85° horizontal x 8° vertical) symmetrical curved wave guide.

The system's shape is trapezoidal, so we can better angle and focus its elements. This feature could partially solve front fill applications, if the front fill focused elements could be managed independently a part from the other elements of the array. That can be done with the MidArray, as each loudspeaker is individually DSP controlled by its own digital processor.

Every MidArray has built in the amplifiers and digital control required to vary each of the features of the enclosure. This performance give us the possibility to program air absorption correction, modified eq's and gain for front fill situations, directivity control... and all the parameters we need to optimize the overall performance.

PCC software control screens





Tecnare MidArray rear view

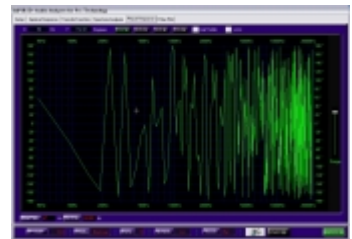
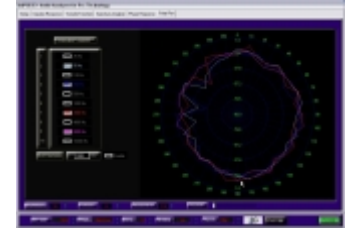
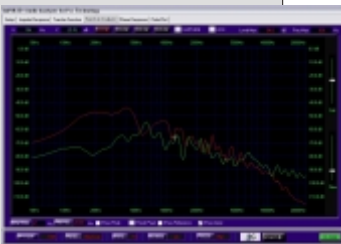
With the mouse of a small laptop, the sound engineer can vary, in real time, any of the parameters of each of the speakers. After starting TECNARE software, the system will identify the speakers connected to the net, showing them in the network window of the program. You only have to choose the speaker to be managed, and six different windows will be available for the sound engineer to control everything.

The program allows the storage of as much presets as desired, that can be loaded any time. With this way of operation, sound systems become "far away" more flexible. A lot of patching can be avoided, reducing drastically rack controls. At the same time, equalization, crossovers, limiting, delay,.. of each box no longer has to be the same, without the hieroglyphic that means to do that in a conventional way for a complex installation.



Pcc Technology Software Screen controls

The system incorporates as standard a very powerful audio analyzer. The sound engineer can check the system's response, on spectrum or transfer mode, while modifying any of the various audio controls available on the system. It also incorporates a setup screen, with an audio generator, markers for a delay measurement, and vu-meters,... Impulse response, phase response and polar plot analysis are also available.



PccTechnology audio analyzer screens

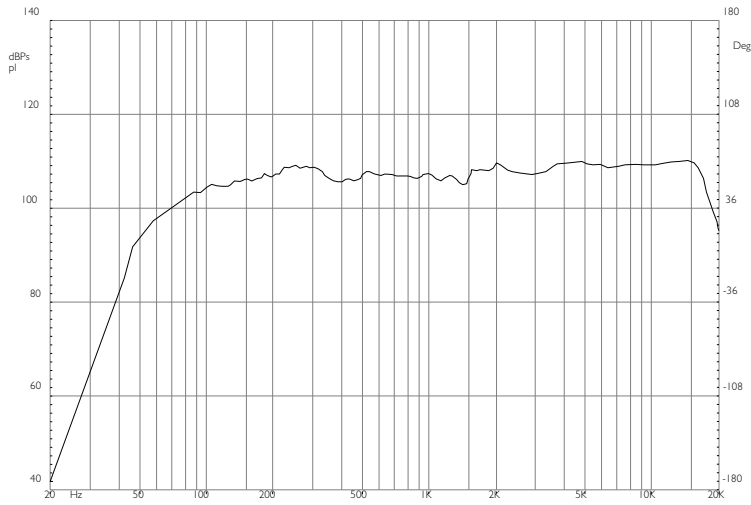
The MidArray has built in proprietary hardware for simple, fast and safe rigging. The enclosure has been made with the latest techniques assuring a perfect and rigid construction. Weatherized finish is provided, as the cabinet is coated with rugged Durawound texture finish and protected with specially treated grilles.



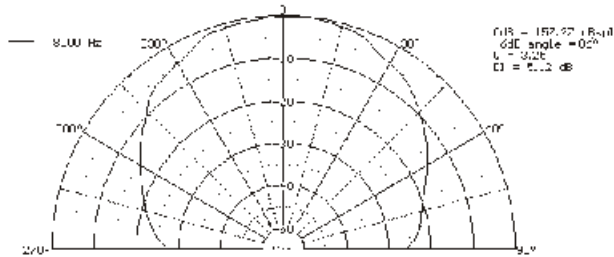
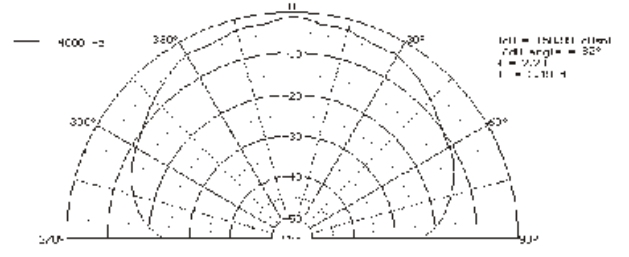
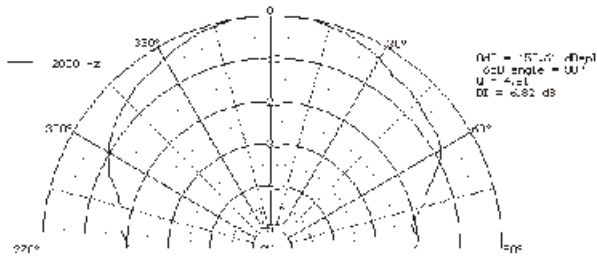
TECHNICAL SPECIFICATIONS

- Frequency response: 69 Hz-17KHz + 3 db (1 box)
- Power Handling: 600W Low / 300 W Mid / 200W R.M.S High
- Nominal peak : 137 dB
- Coverage angle : 85° horizontal x 8° vertical
- Drivers : Low 1x12", Mid 2x6 and a half " , High 2x1.5" compression driver
- Dimensions : 44 (front height) – 31 (rear height) x 94 (width) x 60 (depth) cm
- Weight : 55 Kg

DIAGRAMS



FREQUENCY RESPONSE



HORIZONTAL POLAR PLOT CURVES



TECNARE
SOUND SYSTEMS

Is a™ Designed and manufactured in Spain by



Pº Ind. Monte Boyal. C/Encinar 282
45950 Casarrubios del Monte (Toledo). SPAIN.
Phone: +34 918 170 110
Fax: +34 918 183 053
www.tecnare.com
exel@tecnare.com