



**5320** 8 Ω  
**5370** 4 Ω

**B38**

PROFESSIONAL SERIES

## 15" Bass Midrange Drivers Very High Sound Pressure Level High Sounding Quality

### APPLICATIONS

These models, while derived from SP5050 are optimized for very high SPL two or three way sound reinforcement systems of high sounding quality.

The object of our research was the development of a lighter cone assembly to optimize sensitivity without decreasing toughness and life duration.

The challenge is successful with our special treatment of both sides of the cone which allows it to withstand tremendous SPL at very low harmonic distortion levels.

Thus, these models can be used far into the midrange frequencies (over 1.2 kHz if needed) without sacrificing sound quality.

Optimum acoustical load is Reflex enclosure from 45L to 70L tuned around 46 Hz.

### DESIGN CONCEPT

**DEFLECTION CONTROLLED DIAPHRAGM** optimized for dynamic damping. DEFLECTION CONTROLLED DIAPHRAGM technology consists in optimizing the shape and material of the diaphragm so that it works as a mechanical transmission line, to avoid breaking modes as well as mechanical threshold which destroy sound quality.

This leading edge technology offers substantial sonic advantages. Among them: sound coherency, fast transients, stable sound imaging, high sensitivity, wide frequency range and reduced directivity pattern.

**VENTED COMPACT MAGNET SYSTEM.** It has been carefully optimized to obtain maximum transducing efficiency while avoiding nonlinear behavior such as coil inductance variation with position, flux modulation, harmonic distortion, rest position offset, air compression and off-axis voice-coil pushing.

Its design incorporates a T-shaped and vented pole piece, and a flux stabilization ring. It also takes into consideration demagnetization at cold temperatures.

**INTERCOOLER SYSTEM** (patented). Entirely integrated into the loudspeaker itself, the INTERCOOLER SYSTEM extracts the heat produced by Joule effect in the voice-coil by the means of an air flow directed through the heatsink rims of the basket by the motion of the dust-cap and the spider.

The gain brought about by this technology is over 20 % of extra power, so for example, a 3" coil according to this design has the same power handling capacity as a classical 4" one.



### FEATURES

Power handling capacity **500 W AES**  
Reference efficiency (1W @ 1m) **99 dB SPL**  
SPL<sub>max</sub>(continuous) **122 dB SPL**  
Usable frequency range **40-2000 Hz**  
Environmental withstanding **Outdoor+**

### ARCHITECTURAL SPECIFICATIONS

**NOMINAL DIAMETER** : 380 mm.

**FRAME** : High tensile alloy pressure die-cast basket with patented INTERCOOLER SYSTEM.

**MAGNET SYSTEM** : 3" highly energized, heat extracting design with vented pole piece and flux stabilizing ring.

**VOICE COIL** : High-temperature stabilized copper ribbon wound on high-strength glass polyimide former.

**CONE ASSEMBLY** : High-strength cellulose fiber cone and central dome impregnated and coated on both sides with damped resins, fitted with double roll treated and damped fabric surround.

**SPEAKER MASS** : 9.10 kg.

