

## FitalPRO's Newest mid-frequency driver

### The 6PR150, "Professional" series: a "born leader"

"The production was lengthy and challenging, but in the end we released the 6PR150 driver, for mid-frequencies, just like we wanted it" stated Flavio Naggi, of FitalPRO.

With this announcement, FitalPRO, is proud to officially "launch" the newest "Professional" range loudspeaker for mid-frequencies, the "6PR150".

Despite the intentions announced at the beginning of the year, it was never brought into production because it was never able to completely convince all of its "makers".

Therefore, the FitalPRO R&D department immediately dismantled, analyzed, re-designed, refined and literally turned it inside out to be sure to bring to light - finally - the desired electro acoustic characteristics - a chip off the old block - was sculpted from the old M6N8-150 evolving into the final 6PR150 version after an entire year of effort.

"Practically, the only part of the original project is the basket" - confirmed Flavio Naggi, FitalPRO Overseas Sales manager , "a year of continuous improvements because it just did not respect the design input of both the Marketing and the R&D department. Therefore, we went back to the drawing board, worked a lot on the details, adopted a number of special solutions and materials, and in the end we achieved the product we wanted!"

Here are a few of the fine features that the new 6PR150 boasts:

- A waterproof cone created with a mix of cellulose pulp and a variety of long mineral fibers.
- The treated cloth surround is highly dampened at a mechanical level.
- The dust cap, differently from the classic small spherical domes, adopts a special design shape, similar to a whizzer cone designed as an extension of the cone's profile.

It has the function of increasing the distance between the acoustic emission center of the cone and

the surround.

- The superficial varnishing treatment of the cone, surround and dust cap, offer quite a "smooth" frequency response without break-up.

Practically, a lot of work was done on the phases, acoustic approach and "personality" and today, the 6PR150 reflects the quality standards of the whole FitalPRO professional loudspeakers range.

This is a driver destined to reproduce the vocal range from 300 to 4.000 Hz; 6" (160 mm) diameter, incorporates a 52mm voice coil, can be driven with 150W nominal and 300W peak power.

Flavio Naggi concluded: "This acoustic target performance was achieved, in the end, "with a quite flat curve" with a good 97 dB of real efficiency (1W@1m) in free air, which is different from the efficiency measured by the majority of our competitors who measure the woofers in enclosures. We can definitely affirm that there are very few products like this one on the market, which is exactly what we aimed for!"

The 6PR150 is a pure mid-range, which with proper double acoustic resonators in a double reflex case can be pushed almost to the limit of its natural resonance frequency ( $F_s$ ), extending its frequency response down to 120 - 150 Hz, making it also useful in compact "line array" systems.

Naturally the application of a demodulation ring also in this model minimizes THD (Total Harmonic Distortion) especially in the mid-range and ...the results can be "heard".