

TECHNOLOGY

RCF invest in a continuous process of constant innovation to guarantee the best possible sound. We are one of only a few loudspeakers manufacturers worldwide who have the ability to completely design and manufacture transducers, speaker systems, amplification, cabinets and control electronics.

Three engineering departments – acoustic, electronic and mechanical – work closely together to offer innovative projects with finite control of each detail, from the loudspeaker voice coil wire to the highly efficient extended dynamic amplifier topology, to the acoustic projects of the cabinets to the mechanic designs for loudspeakers rigging.

Computer aided simulation software is used to assist the understanding of transducer behaviour and amplifier operation together with the relationship of dynamics and transient response.

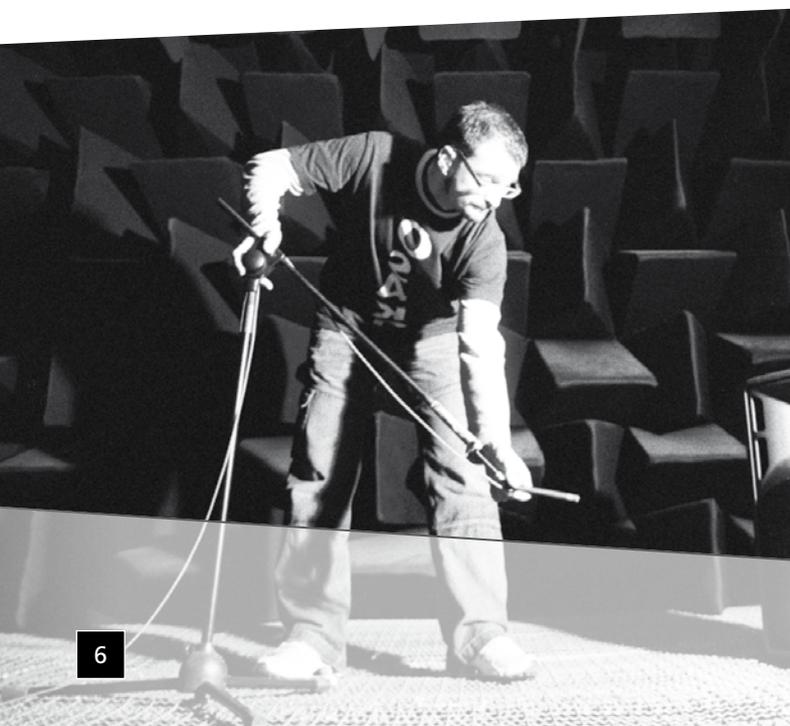
We utilise state of the art software packages to identify magnetic circuits, voice coil dynamics, suspension linearity, horn dispersion simulation, crossover filters, amplifier thermal behaviour etc.

Our heritage in audio combined with our state of the art R&D and manufacturing process allow us to seamlessly integrate all the ingredients to design and build our Professional Audio Products.

Transducers

RCF transducers have always represented the ultimate performance, the highest power handling and the most advanced technology, thanks to the purity of sound combining the absence of distortion and the ability to withstand high power levels over a long period of time.

RCF has developed a unique voice coil, combining the advantages of inside/outside technology to the superior quality of polyimideimide materials. The inside/outside coil offers many advantages such as double dissipation surface and best mechanical resistance. Today we continue to push the boundaries with new designs and materials (Neodymium, Kevlar, Mylar carbon fibre, titanium), to use the most advanced moulding and assembly technologies and to operate the same extensive quality control procedures for delivering the best possible sound.



Amplification and electronics

RCF amplifiers and electronic technology has been accurately developed during the years resulting in the most advanced analogue and digital signal processing.

Microprocessor and DSP complex algorithms are designed to offer the maximum flexibility and control. The newly designed DIGIPRO amplifier delivers 500 + 250 Watt in two-way systems and 1000 Watt in bridge subwoofer configurations.

The unique PFC digital power supply is designed to offer a full voltage supply from any plug. Every component is designed to perfectly match the transducers used in each product, resulting in superb performance and maximum reliability.

Manufacturing

In RCF, technology stands side by side with craftsmanship. Along with the most advanced production technology an impressive staff of skilled workers builds and check every component of our products.

In the transducer department every compression driver and low frequency transducer is hand made and carefully checked for the optimum result.

We now manufacture the cabinets for our loudspeakers in our in-house wood shop. We choose the best Baltic Birch wood and cut it with the most advanced Computer Numerical Controlled machines in order to achieve maximum precision and quality. A team of expert wood workers hand-finish every cabinet before the painting process. The final loudspeaker assembly is made with the maximum care in every detail in order to deliver a perfect, state of the art product.

