

This new surround sound speaker was created to be part of the most prestigious 5.1 and 7.1 home theatre systems.

It uses the technology developed for the ACT line. The D1 can be used as a bipole or dipole speaker to facilitate integration in your sound system.

The front drivers are classic to all models of the ACT line and known for their excellence. With its 2 very specific side drivers and, the D1 offers very high level performances.

Drivers	
Tweeter	Horn BC100
Woofers	14 cm polypropylene
Side drivers	2x5 cm Radial Neodyme magnet
Terminals	WBT - double wiring
Crossover	6/6 dB at 3,5kHz 6 dB at 100Hz (lside)
Performances	
Frequency Range (+/-3dB)	65Hz - 50kHz
Distorsion	<1,5%
Maximum power "large"	80 Watts
Maximum power "small"	200 Watts
	Suggested cut off frequency > 80Hz
Sensitivity (2,83v/1m)	88,0 dB
Nominal Impedance	4 Ohms
Minimum Impedance	3,6 Ohms
Specifications	
Dimensions (HxWxD)	30 x 35 x 17 cm
Weight	10 Kg
Cabinet	MDF HD 22mm
Diffusors	YES
Resonators	NO



En créant la gamme ACT, BC Acoustique a voulu donner naissance à des enceintes au style pur et racé, techniquement très abouties.

Les enceintes ACT sont le fruit de longues années de recherches et de mises au point minutieuses. Leur ligne tendue et épurée ne peut trahir les efforts techniques déployés pour un tel aboutissement.

Trois aspects principaux ont fait l'objet de recherches toutes

The Tweeter

For the treble of the ACT line, BC Acoustique chose to develop the BC100 horn tweeter. A common model to all ACT speakers, this tweeter is the result of an important collaboration with Fostex, one of the most prestigious High End drivers' manufacturer.

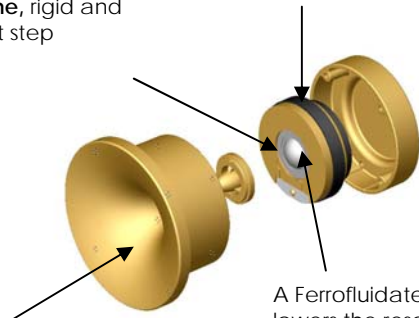
Compared to a classic dome tweeter, the BC100 brings a remarkable definition of higher frequencies, an incredible clarity, efficiency and good transience.

Its frequency response chart is regular up to 50 kHz for an ideal transcription of high definition sources (SACD or DVD-Audio) without the inconveniences that can be found with super tweeters.

The BC100 can also reproduce all the dynamic that you can find in music or movies without any loss or distortion.

Titanium **Dome**, rigid and light for a fast step response.

A large **double magnet** gives the motor power and speed.



A Ferrofluidated **moving coil** lowers the resonance frequency and increases power handling.

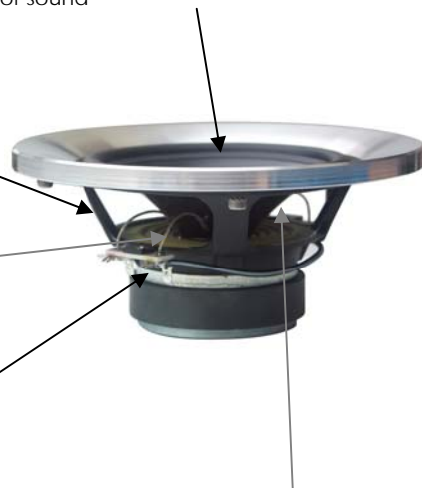
Aluminium **horn** with a profile developed to improve frequency response linearity, ease the phase coherency and limit directivity

The use of a **Polypropylene diaphragm** with variable thickness makes an excellent compromise between lightness and rigidity. Damping has been particularly studied to guarantee the neutrality of sound

Rigid **basket** with a very open rear side to reduce the disturbing primary reflections

Spider was specifically studied to offer a perfectly symmetrical movement

Double moving coil for more energy in the bass.



Cone profile and **suspension** specifically designed for a steady frequency response. This allows the use of slow slope crossover for higher phase coherence

Bass midrange

A 6" driver is in charge of the bass midrange. It was conceived in cooperation by BC Acoustique and the renowned Norwegian drivers' manufacturer SEAS under their high quality standard..

Polypropylene was chosen for its high qualities, particularly its lightness, rigidity and neutrality. It offers a very high density and top clarity.



The side drivers

The performances of this very small drivers are amazing. With their radial neodyme magnet (patented) they offer power and sensitivity as good as classic drivers.

Their frequency response, 150Hz to 20kHz, and low directivity are ideal for surround speakers.



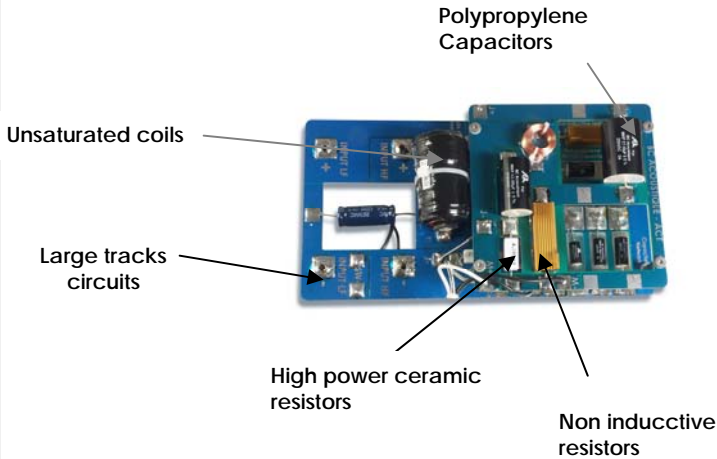
Crossover

The crossover of the ACT line was designed with components selected for their top quality. The state of the art connectors come from WBT renowned for their mechanical and electrical performances. Internal cables all come from Tara Labs, a leader in cable technology.

A switch on the back of the speaker allows you to select either bipole or dipole. For Dipole, the side drivers will be out of phase which creates a more "spatial" sound with less directivity.

The other specificity of the D1 is its double terminal that let you connect the front and side drivers separately. In a 7.1 system, the D1s can be used as « surround » or « surround back ».

To make the ACT line easy to adapt to a room, the use of a number of specific resistors allow the auditor to change the level of the tweeter. 5 positions are available to increase or reduce the tweeter level by up to 3dB.



The Woodwork

The woodwork is made out of high density 22mm thick MDF. All wood panels are veneered on both sides to avoid any risk of bending of the wood on the long term.

The internal architecture is quite complex, using diffusors and resonators to eliminate all sound coloration and resonances. The speaker gains in neutrality and clarity.

Damping material is used in strategic places to absorb internal waves without affecting micro information.

No screw is visible from outside. All drivers are mounted from inside the cabinet. The aluminium ring allows a tight hold of the driver and control of mechanical effects on the back of the driver. The rings curved profile avoids any reflection on the front of the speaker.

Those small details...

The front grilles are made with removable fabric that can be changed. A magnetic system of fixing uses powerful Neodymes magnets inserted inside the cabinet and the grille. Thus the fitting is always perfect. The use of magnets has absolutely no effect on sound.

On the contrary this solution does not use the usual plastic pins that create problems of reflections and disturbances on the frequency response.





Quality Control

The ACT speakers are carefully hand made in BC Acoustique's factory. All drivers are tested, selected, ran in and paired.

Crossover is set precisely to compensate potential variations in one or more components. Each speaker is thoroughly tested and measured. It is then compared to the standard measurements.

All these information are recorded and stored in our data base to guarantee the quality of technical service for each speaker that we produce.

Finish and Accessories

The ACT speakers are available in 4 different finish: Wengé, Amarante, Maple, Cherry (from left to right).

They are delivered with a box of accessories including handling gloves, a soft rag, a bottle of cleaning lotion, a test CD that will allow you to set your installation and improve the run in of your speakers.

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