Let us entertain you

JAMO C 80 SERIES

jamo®
Danish Sound Design

Jamo C 80 series

C 80 is a series of top of the range stereo and surround speakers from Jamo. Based on the experience our development team gained from creating classic models such as the E 8 and D 5, this series of seven speakers draw on the very latest speaker technologies and construction techniques.
The aim of this series is to recreate the perfect concert experience - nothing more and nothing less. Regardless of size, every speaker in the series is represented by the capital C as in Concert. The sculptural C 80 speakers, with their exceptional level of finish and perfectly balanced sound, are a tribute to the great music and film experiences that we all love and take such remarkable pleasure from.
As all of the speakers in the series are developed using the same uncompromising philosophy, it's possible to combine them in a number of different ways. Sonically the C 80 family is characterised by its genuinely authentic acoustics. The series always conveys highly detailed and beautifully sound across the entire frequency spectrum. And selecting a system that includes the unique C 80 SUB will deliver an almost shockingly well-defined, dynamic auditory experience.
Whether you are looking for the ideal cinematic thrill or the perfect musical experience, the C 80 series is guaranteed to blow your acoustic window wide open.

C 809 / C 807 / C 805

Made for serious listening

The flagship of the C 80 series is the C 809. And here we're not just talking about another high quality speaker from Jamo. This impressive 3-way speaker is the very embodiment of Danish Sound Design – superbly cutting-edge sound technology enclosed in beautifully designed cabinets of the highest quality and finish.
One level down you will find the C 807 – an exceptionally melodic speaker. The C 807 is the natural choice front speaker for any high-end surround system. Yet it can also deliver a great musical experience performing as a stereo speaker – either with or without the C 80 SUB.
Although the woofer units have been adjusted in size to fit the smaller cabinet, technically speaking the C 805 has exactly the same state-of-the-art technology armoury as its bigger brothers. This makes C 805 a real best buy if you want to reproduce genuine concert and cinema sound in a smaller room, preferably backed up by the C 80 SUB.

Spelt with a capital C as in Concert

C 803 / C 803 IW

Made for more ...

Like the whole C 80 range, C 803 is constructed with arch-shaped sides that, together with internal bracing, makes the cabinet extremely rigid. This ensures a clean and well-defined reproduction of midrange detail.
If you want a fully integrated sound solution then consider our C 803 IW, which is an identical in-wall version of C 803. C 803 IW is supplied with both a paintable grill and a black front cloth.

C 80 CEN

Screened for the screen

C 80 CEN uses the same tweeter as the rest of the C 80 range to achieve optimum vocal clarity, partnered by a pair of the same drivers used in C 805 and C 80 SUR for maximum timbral accuracy. Naturally the C 80 CEN centre speaker is magnetically shielded to avoid image distortion, when used in combination with a traditional CRT television. Thanks to the rubber cradle it is easy to adjust the angle of the speaker in relation to your listening position.

C 80 SUR

Welcome to reality

If you want to create the perfect surround sound experience it's vital that the rear speakers generate sound diffusely. The C 80 SUR add to this experience by performing as left and right surround speakers to create the perfect interaction with the front speakers.
To improve the performance of the **dipolar** arrangement Jamo has developed the unique **eXtended Bass Response** (XBR) system. This allows the C 80 SUR to combine the best from both bipolar and dipolar configurations.
If you wish an even more discreet surround solution you may alternatively consider the unique in-ceiling surround speaker SU6.521K4 from our Custom program. This would work perfect with e.g. C 803 IW as front speaker.

C 80 SUB

How low can you go?

C 80 SUB is a front and rear-firing subwoofer equipped with two 254mm/10mm aluminium cone woofers in a closed cabinet.
The heart of this low frequency power plant is a 1800W BASH amplifier, which should be more than enough for both the most demanding music lovers and serious film fans everywhere. With C 80 SUB you not only get the traditional options of adjusting and fine tuning your subwoofer's sound **level**, **phase** and **cut-off frequency**, you also get a variable **boundary gain compensation**, giving you the opportunity to offset the harmful effects that a room can have on sound at the lowest frequency levels. C 80 SUB also features **Motional Feedback (MFB)** technology which results in a very accurate and dynamic sound.
C 80 SUB also features a 12V trigger input, so it can be turned on and off from a A/V receiver/controller that has a 12V output, ensuring that the subwoofer always will be active when the A/V receiver/controller is turned on.

Black ash | Dark apple | White (C 803 IW)

Spelt with a capital C as in Concert

C 803

C 803

Jamo Tech platforms

WaveGuide

WaveGuide refers to the unique way Jamo has shaped the tweeter's face-plate. The result is a controlled sound pattern with a more open and dynamic reproduction of sound. WaveGuide makes it easier to position the speakers in the room.

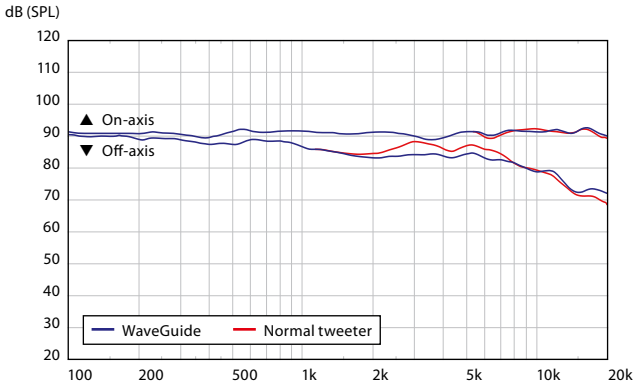
Another big challenge is to secure a uniform dispersion pattern in the treble and midrange frequencies. In general, dispersion gets narrower at higher frequencies. Consequently in the area where the mid/woofer and the tweeter should integrate smoothly, the mid/woofer has a narrow dispersion and the tweeter has a wide dispersion. This problem is solved with the Jamo WaveGuide. The completely smooth design of the WaveGuide also reduces diffraction to an absolute minimum. Finally, the WaveGuide increases treble output in the lower treble range which means the tweeter needs less power for the same SPL. So, power handling is improved and distortion is reduced.

DTT (Decoupled Tweeter Technology)

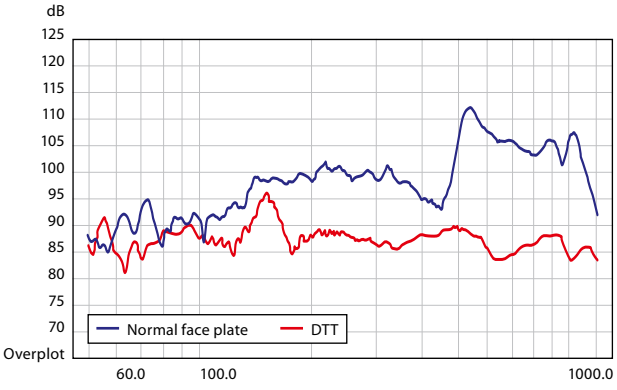
DTT* (Decoupled Tweeter Technology) is a remarkable mounting system specially developed by Jamo.

One of the biggest challenges when designing speakers is preventing unwanted cabinet vibrations from clouding or colouring the sound. High frequencies are particularly susceptible. This problem is solved using the ingenious Jamo DTT. By decoupling the tweeter from the rest of the loudspeaker, vibrations transmitted from the front baffle to the tweeter are reduced by more than 20dB resulting in an uncommonly detailed and realistic reproduction of high frequencies.

* Patent pending



The WaveGuide results in a uniform treble dispersion pattern from 10kHz all the way down to the critical x-over point at 2kHz and thus secures a seamless transition to the mid/woofer – both when listening on and off axis.



Difference between vibrations in a normal face-plate and vibrations in a face-plate employing Decoupled Tweeter technology.

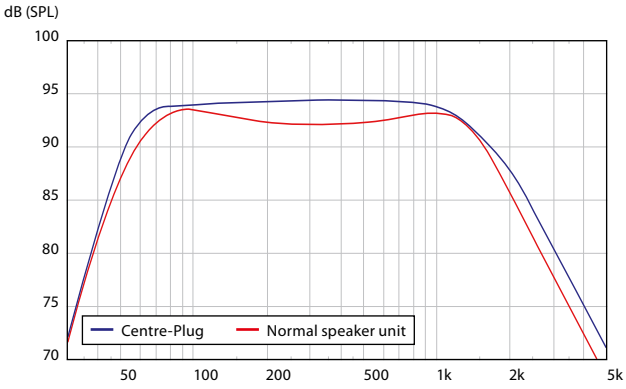
Jamo Tech platforms

Centre-Plug

The Centre-Plug replaces the traditional dust cap, making the cone both lighter and more responsive, while also cooling the voice-coil, resulting in a higher power handling and a stable sound reproduction when playing loud. The design allows increased power-handling capabilities along with a more uniform, precise and dynamic reproduction of sound.

The Centre-Plug also prevents potential break-up points where the dust cap would have been glued to the cone. In addition, it prevents over- and under pressure behind the dust cap when the cone moves back and forth.

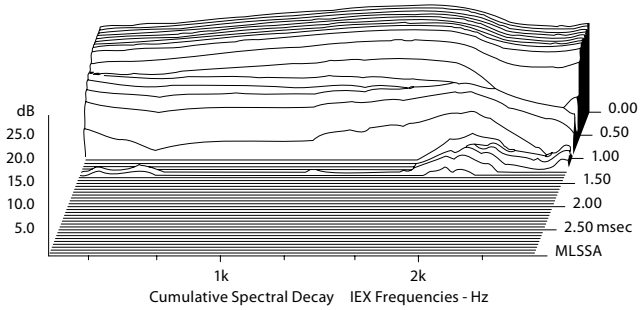
The advantage is more dynamic and precise sound reproduction.



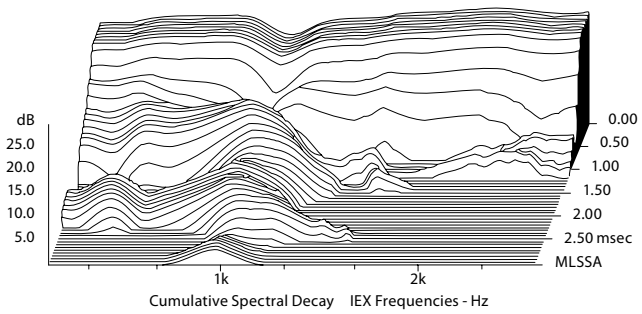
Sound pressure level from a speaker with Centre-Plug compared to one without, when playing at high play-back level.

HCC (Hard Conical Cone)

The HCC technology (Hard Conical Cone) enables the driver to reach far beyond midrange frequencies before any significant cone break-ups occur. The material's rigidity and the membrane's conical shape ensures the unit creates clear and detailed sound with very little distortion, even at high sound pressures. This combines with the natural rubber suspension, which effectively prevents vibrations from travelling back to the diaphragm, the result being a very well-controlled diaphragm that operates without break-ups up to 4kHz -well beyond its working range.



Jamo HCC operates without break-ups in critical areas.



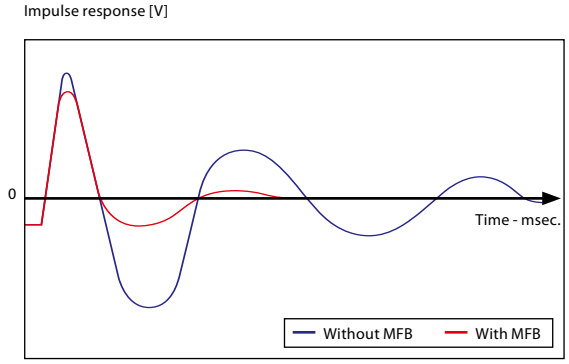
Conventional speakers don't fare so well!

Jamo Tech platforms

Motional Feedback (MFB)

C 80 SUB features a Motional Feedback circuit. When a large woofer has been abruptly driven by a strong sonic impulse such as an explosion or a timpani, the woofer continues moving after the impulse stops. The MFB circuit compares the impulse to be reproduced with the actual movement of the woofer. If the woofer moves unnaturally in relation to the input signal, the MFB circuit corrects the error before it becomes audible. Furthermore, the MFB makes it possible to equalize the subwoofer to go deeper without losing any precision. The result is incredibly accurate, deep bass, full of punch and dynamics.

Motional Feedback (MFB)

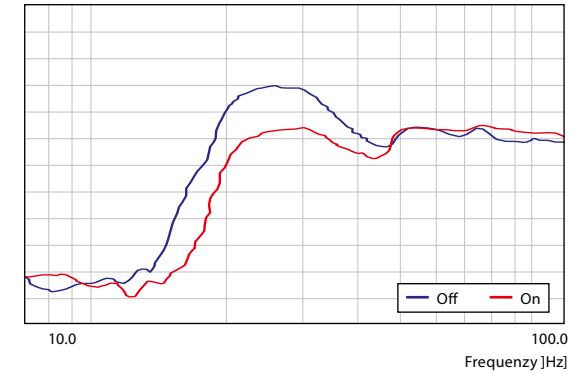


Boundary Gain Compensation

The Boundary Gain Compensation filter in C 80 SUB compensates for the room influence at low frequencies, as any room amplifies the lowest frequencies. The magnitude of the room's amplification depends on the room size and where the sub is positioned in the room – normally it increases the closer the sub get to a wall. This can result in too high a bass level from approx. 60Hz and increasing downwards – in the range between 20 - 30Hz it peaks up to 5 - 10dB in an average room!

At first this could sound really impressive, but the sound quickly begins to sound 'boomy', especially when listening to music, and rather annoying. So the Boundary Gain Compensation ensures a very linear in-room bass response and gives you more flexibility when it comes to placement and choosing your favourite listening position.

Boundary Gain Compensation

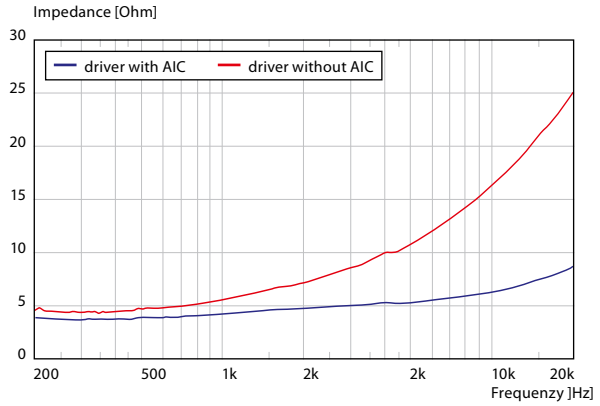


Active Impedance Control (AIC)

All C 80 mid/woofers feature Active Impedance Control (AIC), an innovative extension of existing techniques to reduce distortion in electrodynamic loudspeaker drivers.

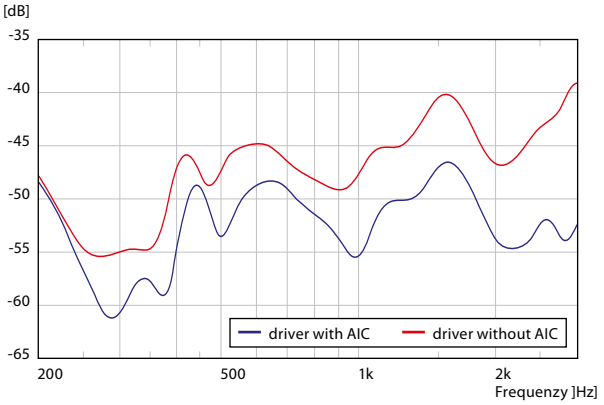
The AIC makes the impedance more linear in the mid and high frequency range. AIC also increases the sensitivity and total SPL in the upper range of the driver.

AIC - Active Impedance Control:



The effect of AIC is a clearer midrange with a markedly reduced 'roughness', especially noticeable on vocal reproduction. In figures, this amounts to a reduction of third-order harmonic distortion of around 6dB (ie a 50% reduction).

Harmonic distortion



When a voice coil is moving in and out of a magnet gap, it changes induction. When the coil moves inward, the induction increases and vice versa. This causes the current from the amplifier to be modulated, creating very audible distortion.

Furthermore the current flowing in the voice coil modulates the magnetization of the magnet assembly which also causes distortion of the current.
By using an extra coil, placed inside the voice coil with opposite polarity to the voice-coil winding, the inductance variation and the flux modulation can be significantly counteracted.

Compared to the conventional conductive rings in a magnet system AIC has the advantage that it is significantly better at higher frequencies i.e. in the midrange (on voices) where distortion is most audible to the human ear.

Model	C 809	C 807	C 805	C 803	C 80 CEN	C 80 SUR	C 80 SUB	C 803 IW	SU6.521K4
Placement FRONT	•	•	•	•				•	
Placement CEN					•			•	
Placement SUR						•			•
Placement SUB							•		
System	3-way bass-reflex	2½-way bass-reflex	2½-way bass-reflex	2-way bass-reflex	2-way bass-reflex	2-way dipole	Closed	2-way closed	3-way dipole/bipole
Woofer mm / in	2 x 180 / 7	180 / 7	155 / 6	180 / 7	2 x 155 / 6	2 x 155 / 6	2 x 254 / 10	180 / 7	165 / 6½
Midrange mm / in	180 / 7	180 / 7	155 / 6						38 / 1½
Tweeter mm / in	25 / 1 DTT	25 / 1 DTT	25 / 1 DTT	25 / 1 DTT	25 / 1 DTT	2 x 25 / 1 DTT		25 / 1 DTT	25 / 1 Dome
Power W long / short term	200 / 400	180 / 360	160 / 320	125 / 250	160 / 320	160 / 320		125 / 250	60 / 120
Sensitivity dB (2.8V/1m)(2.8V/1m)	89	89	88	87	88	87		87	90
Frequency range Hz	30-24,000	35-24,000	40-24,000	45-24,000	70-24,000	65-24,000	20-200	45-20,000	60-22,000
Impedance Ohm	6	6	6	6	6	6	22k	6	4-8 switchable
Rated output W							1800		
Weight kg / lb	33.6 / 74.1	28.3 / 62.4	18.5 / 40.8	9.9 / 21.8	11.6 / 25.6	7.5 / 16.5	25.0 / 55.1		2.8 / 6.2
Dimensions (frame, baffle, cabinet) mm / in (H x W x D)	1157 x 252 x 428 / 45.6 x 9.9 x 16.9	1007 x 242 x 406 / 39.6 x 9.6 x 16.0	877 x 201 x 347 / 34.5 x 7.9 x 13.7	380 x 225 x 341 / 15.0 x 8.9 x 13.4	212 x 501 x 281 / 8.3 x 8.9 x 13.4	293 x 286 x 181 / 11.5 x 11.3 x 7.1	447 x 390 x 432 / 17.6 x 15.4 x 17.0	400 x 270 x 85 / 15.7 x 10.6 x 3.3	342 / 13.5
Dimensions (hole) mm / in (H x W x D)								347 x 225 x 110 / 13.7 x 8.9 x 4.3	307 x 184 / 12.1 x 7.3
Back box size litre / in³								14 / 854	23 / 1400
Optional RIK									RIK10.5LW
Finish	Black ash, Dark apple	Black ash, Dark apple	Black ash, Dark apple	Black ash, Dark apple	Black ash, Dark apple	Black ash, Dark apple	Black ash, Dark apple	White (paintable) and Black grill incl.	White (paintable)

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