

DAVID VERSUS GOLIATH

Compact or floorstanding speaker – which is better?
To answer this question, STEREO put both versions of
the same line by Canton, Dynaudio, Q Acoustics, Rosso
Fiorentino, and Wharfedale in the sound booth
and let them duke it out.

By Tom Frantzen and Michael Lang





We tested the following:

Canton Chrono 513/519	20
DC Dynaudio EMIT	22
M20/M30 Q Acoustics	24
Concept 20/40	26
Rosso Fiorentino Elba/Giglio	28

TWO-TIMING

Canton has replaced two of its previous lines with the new „Chrono“ range, using more precise drivers at competitive prices.



The question is simple: do you buy a compact speaker, or a floorstanding model? The answer, of course, depends a lot on the size of the room: just as you wouldn't enjoy any of the floorstanding speakers in this test in a broom closet, it would be just as silly to try to fill a dance hall, say, or an aircraft hangar, with the little compact speakers here.

Proven ingredients

At Canton, as you would expect, the tweeter used across the Chrono line-up is the same – anything else would make little economic sense. The proven ADT-25 model, with its aluminum-manganese dome diaphragm has been used time and again across the years, albeit with subtle improvement and development over time, and has even found its way into higher-class Canton ranges. As a result, the high-frequency measurements are (almost) the same across the range, the floorstanding models merely having slightly greater efficiency and are a tad better linearity.



Similarly there's a commonality of drivers in the midrange and bass departments, the aluminium-coned AM-180 driver used as a mid/bass in the 513 'bookshelf' mode being joined in the 519 DC by two longer-excursion AW-180 drivers of a similar construction for a clear enhancement of the dynamic capabilities and bass extension. Both drivers use Canton's Wave Surround, its multi-curved profile designed to reduce resonances while allowing that longer 'throw'.

Both designs should be used with a slight toe-in toward the listening position in order to achieve an optimally balanced, linear result, although this proves more critical for the larger model. The 519 DC also demonstrates more linear impedance possibly due to the company's Displacement Control DC technology used not only as a subsonic filter to suppress superfluous subsonic frequencies, but also to refine the overall fine-tuning.

The fact that the compact Canton (of course also supported by bass-reflex loading) is designed to sound like a small floorstanding speaker is shown by the difference in the lowest cutoff frequency, which is only 8Hz higher than that of its floorstanding 'big brother'. This is only half of the disparity between, say, the large and small speakers from Q Acoustics or Wharfedale.

The floorstanding 519 DC three-way speaker created the more balanced sound when placed free-standing in our living room facsimile, but both speakers sound very similar in the mid-to-high range – no doubt about it. In fact, you can't miss it! However, the combination for the (almost) identical mid and bass drivers in the 519 DC, and its greater cabinet volume, combine to give a harmonizing effect, as the fuller low-end of the large sister speaker delivering an optimal counterbalance to the open, vivacious high frequencies. It is the literally a more grown-up speaker, with effortless, tremendous volume reserves, and clearly higher efficiency.

The compact, somewhat „brighter“ 513 is still well-balanced, but can be caught out by music with excessive presence, so we'd recommend placing it a bit closer to the wall, which helps even things up appreciably. Used this way the small Canton sounds similarly complete and almost as impressive as the larger model. Guitar, violin, and even Gudrun Walther's voice on the Cara album „Yet we sing“ receive more body and still stay just a tad more open. Maybe the driver arrangement – classical 'tweeter above midrange' in the compacts, but with the midrange driver above the tweeter on the larger model – plays a role in this.

The 519 DC is the bass-heavy flagship of the Chrono line, so one should avoid push the large Canton speaker (with its downward venting port and absorbing pedestal) too close to the wall. And when it comes to finding the best one to suit a room, its worth remembering that the 513 and 519DC are separated not only by €1,100 but also by two intermediate models: the 517 and 518 DC use smaller 16cm 160 series mid and bass drivers in place of the 18cm units found here.

Overall

The two Cantons maybe siblings, but they're not what you'd call close: the price difference between them is largest of the quartet of pairings in this test. They're different, but both have their merits, the lively little 513 being are a recommendable all-rounder for small to medium rooms while the imposing 519 DC can definitely fill larger rooms and shake the walls come party-time. Each is excellent in its own way, and a highly involving listen.

Tom Frantzen



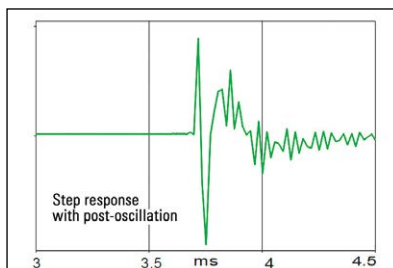
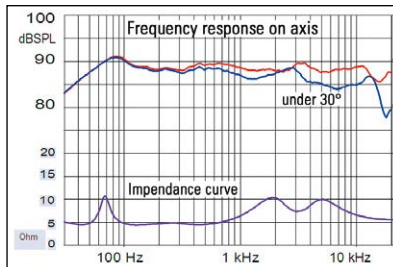
▲ The proven Canton metal-dome tweeter uses dispersion control measure including a grid and a medium "lens"

CANTON CHRONO 519 DC

Pair starting from €1800
(ash black or white, each with polished acoustic baffle)
Dimensions: 25x105x30 cm (WxHxD)
Contact: Canton
Phone: +49 6083/2870
www.canton.de
Warranty: 5 years

Canton's Chrono flag ship is an assertive, well-balanced all-rounder with consistent audiophile virtues at a good price.

MEASUREMENT RESULTS



Nominal impedance	4-8 Ω
Minimal impedance	4.7 Ω at 120 Hertz
Maximum impedance	11 Ω at 68 Hertz
Nominal sound pressure (2.83 V/1 m)	88 dB SPL
Power for 94 dB (1 m)	6 Watt
Lower cutoff frequency (-3 dB)	36 Hertz
Distortion at 63 / 3k / 10k Hz	0.8 / 0.3 / 0.1 %

LAB COMMENTS

The Canton 519 DC displays a well-balanced frequency response, especially on axis, with efficiency slightly above average and bass reaching below 40 Hertz. Not only is the impedance easy on the driving amplifier, it also has no major fluctuations, something vacuum tube and Class D amps appreciate. The 519 sounds good in medium to larger rooms and not too close to the wall. There's minimal timing lag, typical for three-way speakers, and slight, but non-critical, high-frequency resonances beyond the audible range.

STEREO - TEST

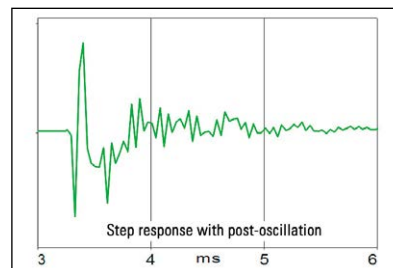
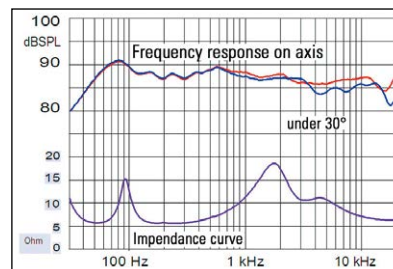
SOUND QUALITY **65%**
PRICE/PERFORMANCE
★★★★☆
EXCELLENT

CANTON CHRONO 513

Pair € 700
(ash black or white, each with polished acoustic baffle)
Dimensions: 19x36x27 cm (WxHxD)
Contact: Canton
Phone: +49 6083/2870
www.canton.de
Warranty: 5 years

This is a surprisingly mature-sounding compact speaker with very good, vivacious fine-tuning. It benefits from use on a stand (LS 600) not too far from the back wall.

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	5.4 Ω at 220 Hertz
Maximum impedance	18 Ω at 1800 Hertz
Nominal sound pressure (2.83 V/1 m)	84 dB SPL
Power for 94 dB (1 m)	31,3 Watt
Lower cutoff frequency (-3 dB)	44 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 / 0.2 / 0.1 %

LAB COMMENTS

The amplitude-frequency response of the compact Canton 513 is well-balanced and reaches below 50 Hertz. It has average efficiency and the impedance is not amplifier-sensitive. The step response displays good timing and light, uncritical high-frequency resonances above the audible range. It becomes rather more full-bodied when used closer to the wall. Recommended for small- to medium-sized rooms.

STEREO - TEST

SOUND QUALITY **80%**
PRICE/PERFORMANCE
★★★★☆
EXCELLENT

DRESSING DOWN

How can a manufacturer make a more affordable product while retaining quality? Dynaudio's Emit line shows how it's done.



Danish manufacturer Dynaudio faced a seemingly impossible task: it wanted to keep the qualities of its acclaimed Excite line while making the prices significantly more accessible. Tough, huh?

Of course, the folks from Skanderborg know all the tricks when it comes to cutting costs: simpler cabinets with a foil wrap instead of pricier paint or real wood veneers, avoid variations, lose the magnetic grille-mounts, use lower-cost simple metal spikes instead of expensive aluminum cones, fix with black screws instead of painting them to match the color of the chassis – all the usual stuff. And it's also possible to make cuts the customer won't see but will definitely hear: thinner cabinet walls, simpler internal bracing, lower-quality crossover components, less expensive internal cabling, and finally simpler chassis designs for the drivers.

The Danes, however, lived up to their self-stated reputation for honesty and simplicity: as makers of their own drivers,

they saved in only one area – development costs! To put it simply, they raided the corporate parts-bin, as far as possible drawing only on their kits of existing drive-units, meaning that cabinet dimensions and construction required only small adjustments. Instantly, development costs – usually one of the largest items budget for a new speaker range – were made significantly smaller, to the extent that there was even money left for internal cables made of 2.5 mm OFC copper and a satin lacquer finish for the cabinets.

In fact, only the smaller M 20 model needed to forego its aluminum cast chassis for the woofer, and standard metal piece being used instead – beyond that the aluminum voice coil, symmetric magnet arrangement with pole piece hole, Magnesium Silicate Polymer cones, and coated textile soft dome tweeter are all present and correct, meaning none of the usual Dynaudio ingredients for the „Danes don't lie“ sound are missing. Neither is the linear impedance design, aimed at making life easier for the upstream amplifier, even though the power needs especially of the smaller M 20 suggest you should be generous when picking the wattage of the amp to drive this 'bookshelf' model. The liquid-cooled 28 mm soft-dome tweeter and the 17cm mid/bass unit with its huge 75 mm voice coil were never considered especially efficient.

Routine, but with verve

As was the case with its more expensive competitor, the Toscana Giglio, the sound room showed the M 20 (at € 700 almost spectacularly cheap by Dynaudio standards) to be a watt-hungry unit – though our all-purpose weapon, the Exposure 3010, was up to the task. What was also striking was the care with which speakers are tuned in Denmark: the characteristic components of the company's DNA are always recognizable, both in technology and in sound, and the M20 and the larger M30 floorstander were very close in character.



The M 30, on paper barely 2 dB more sensitive than the smaller M 20, reacted significantly more spontaneously and convinced us with its ease over the entire mid-range, making us somewhat doubtful that it belonged in this price class. A little on the warm side, benefitting from a bass peak at about 100 Hz, it was able to extend well into the bass range and still sound clean. True, it began its charm offensive a bit hesitantly, but then proved to be a consistent performer, and we also have no complaints about its spatial projection. It sounds spacious and yet precise, which also applies to the M 20 when placed on a stand.

By the way, that comment about the use of stands applies to all the compact speakers in this test field: small does not necessarily mean „stick it on a shelf“! It’s simply that the more discreet and elegant looks are usually achieved at the expense of party volume, simply because the amp has to do more work and the threshold volume of a small bass driver is reached earlier than that of several bass drivers or one large woofer. However, up to that limit every listener will enjoy them: a piano can be recognized as such over all frequencies, just as its size is conveyed with remarkable credibility. Pop music of any type, from Köster & Hocker live to Laurie Anderson, are easygoing and the lyrics easy to understand, whether on the smaller M20 or the heftier M30. At the advertised prices, both should be on the shortlist of any music lover on a budget.

Michael Lang

Single-wiring, bass reflex, the need for stands: commonalities and differences in the M 20 (l.) and M 30 ►

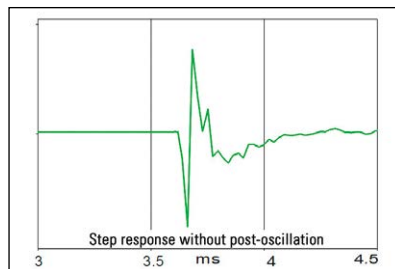
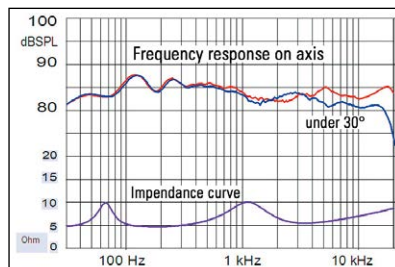


DYNAUDIO EMIT M 30

Pair € 1500
 Dimensions: 17.2x108x29.5 cm (WxHxD)
 Contact: Dynaudio
 Phone: +49 4108/41800, www.dynaudio.de
 Warranty: 5 years

The M 30 is twice as expensive as its compact sister, which gets very close but of course demands additional spending on stands. This larger speaker is definitely money well spent!

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	4.9 Ω at 190 Hertz
Maximum impedance	10 Ω at 1200 Hertz
Nominal sound pressure (2.83 V/1 m)	85,5 dB SPL
Power for 94 dB (1 m)	14.8 Watt
Lower cutoff frequency (-3 dB)	39 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 / 0.1 / 0.1 %

LAB COMMENTS

The frequency response shows the decent bass boost at just over 100 Hz, and the dip between 1000 and 2000 Hz, but all other values are very good and above criticism, provided a slight toe-in toward the listener is used to achieve balance in the high frequencies. The precise step response underlines the speed of the Emit M 30, while the impedance response – hardly ever below 5 Ohm – plus decent efficiency make them suitable for many amps. Spikes are included, and should be used, while the speakers should be about 30 to 50 cm from the rear wall – closer, and the bass becomes a bit muddled.

STEREO-TEST

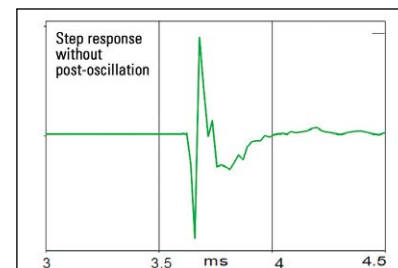
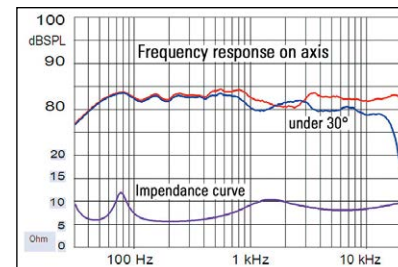
SOUND QUALITY 65%
PRICE/PERFORMANCE
 ★★★★★
OUTSTANDING

DYNAUDIO EMIT M 20

Pair € 700
 Dimensions: 17x32x26 cm (WxHxD)
 Contact: Dynaudio
 Phone: +49 4108/41800
 www.dynaudio.de
 Warranty: 5 years

A lot of people will wonder: ‘How do they do it?’, but the Danish designers will gladly explain: their motto is ‘Make savings, yes – but use some common sense’. Top sound at a price to make you smile!

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	5.3 Ω at 200 Hertz
Maximum impedance	12.5 Ω at 77 Hertz
Nominal sound pressure (2.83 V/1 m)	83.3 dB SPL
Power for 94 dB (1 m)	28 Watt
Lower cutoff frequency (-3 dB)	58 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 / 0.2 / 0.1 %

LAB COMMENTS

The frequency response of the Emit M 20 is more linear than that of the floorstanding M 30, and the impedance is also non-critical. However, while the speaker is power-hungry you won’t go wrong with at least 100 real Watts per channel, depending on the size of the room. Clean workmanship, great step response, hardly any distortion – toe the speakers in slightly towards the listener and enjoy. But don’t forget to use stands: the M 20 clearly underperforms when just stuck on a shelf.

STEREO-TEST

SOUND QUALITY 82%
PRICE/PERFORMANCE
 ★★★★★
OUTSTANDING

Q FOR A SONG

As quartermaster and armourer for the top agent of Her Majesty's secret service, "Q" always has a trick or two up his sleeve. The products of the very British Q Acoustics are no less sophisticated

At about ten years old, Q Acoustics (part of Armour Home Electronics) is a relatively young player in the Hi-Fi world. I personally didn't know much about them other than the name when I saw the interesting and affordable "concepts" of the Brits for the first time in the booths of distributor DC Klaassen at the High End show. Curiosity quickly gave way to recognition of their unconventional solutions when we tested the Concept 20 in STEREO 11/15. For instance, both the Concept 20 and the larger sister model Concept 40 use an intermediate gel layer (Gelcore) between the (double) housing shell of the cabinet, essentially creating a "box within a box" approach. Such sophistication is remarkable in speakers at €500 and €1400 per pair.

Gellin'

The special material is designed to ensure that parasitic (i.e. unwanted) sound emissions are mostly damped, and thus eliminated, by the resonant housing of the speaker, the effect being strongest in the midrange, which is so important for music listening. In effect, the design is aimed at

taking the cabinet out of the sonic equation, while the aluminum baffle with another layer of sub-padding made of butyl rubber also serves for better sound, and even the magnetic mounting of the grilles adds elegance, as does the choice of gloss lacquer black or white finish. These details – as well as the drivers, the crossover, and the overall construction – carry the signature of Essen-based Karl-Heinz Fink, one of the most hardworking and in-demand speaker designers in Europe.

There are times when it would seem quicker to list the companies Fink hasn't worked for as a consultant(!), but among the prominent designs in which he has had a major role are legendary models such as the Mission Pilaastro and Naim Ovator, and his consultancy has been working for Q Acoustics for a many years. The Q Acoustics twins here use the same 25mm tweeter and 12.5cm woofer, with the larger Concept 40 adding a second 12.5cm unit and of course greater cabinet volume, delivering no less than 13 Hz more extension, down to 53Hz in place of the smaller speaker's 66 Hz.

Over-dimensioned magnetic "motors" are designed to give all the drivers the best-possible conditions for spectacular dynamics, and when you add to that a balance of honest, neutral openness and yet smoothness, you have a sound able to prevent and even long listening sessions from dissolving into analytic torture. These speakers are supposed to sound relaxed and natural, but without stinting on involvement – and they do. The „twins“ impress with their very clear, solid, well-differentiated sound – and beautiful timbres.

On the mechanical side, we found it a bit disconcerting that banana plugs don't seem to go deeply enough into the terminal, although they remained in place; that said, the stabilizing 'outriggers' on the floorstanders and the optional stands for



the M20sa– which incidentally use that Gelcore construction for their top-plates – look sensational.

In the listening test, the Q sisters astonished us – they sound almost identical, or at least their timbre is very similar. Yes, the larger speaker quickly corrects that initial, fleeting, and subjective impression as soon as the two models are challenged by volumes, complex structures, and/or basses: good though the smaller speakers may be, even they can't evade the laws of physics when pushed to the limit with the likes of guitars and singing voices. The compact speakers also sometimes strain a bit when placed in free space in a large room, but the larger ones are effortless. In fact, the similarity has an easy explanation: according to QA, both are of two-way bass reflex construction, with only the crossover frequency changing between the two, from 2.9kHz in the Concept 20 to 2.3kHz in the larger model.

New Superstars

I can't help but conclude that the smaller QAcoustics Concept 20, at € 500, is possibly the best deal. However, the big pair at just €1,400 is the superstar in this field when you take into account all the parameters like design, workmanship, technology, and of course most of all sound. It is certainly not the non-plus-ultra, but it does present almost incredible audiophile value, and one of my colleagues bought them – she beat me to it. How will I tell my wife?

Tom Frantzen



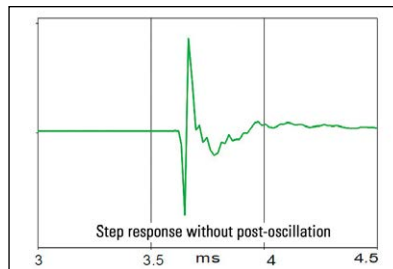
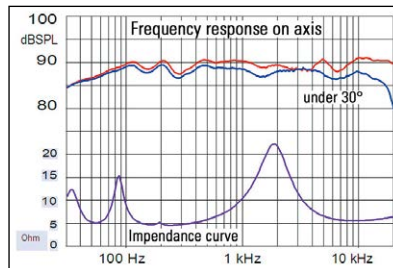
▲ The fleet-footed „outriggers“ on the Q Acoustics floorstanding speakers really make them more stable.

Q ACOUSTICS CONCEPT 40

Pair about € 1400
 Dimensions: 17x97.2x29 cm (WxHxD)
 Contact: IDC Klaassen
 Phone: +49 231/9860285
 www.idc-klaassen.com
 Warranty: 5 years

Musical, confident, with greater bass authority than its smaller sibling (which otherwise sounds completely comparable) and better suited for larger spaces, the Q Acoustics Concept 40 is a veritable „favorite killer“ in its price class. And with its good looks, it will win hearts all over the place. Respect

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimum impedance	4.5 Ω at 250 Hertz
Maximum impedance	23 Ω at 1800 Hertz
Nominal sound pressure (2.83 V/1 m)	89 dB SPL
Power for 94 dB (1 m)	7 Watt
Lower cutoff frequency (-3 dB)	53 Hertz
Distortion at 63 / 3k / 10k Hz	0.8 / 0.3 / 0.1 %

LAB COMMENTS

In terms of measurements, the Q Acoustics floorstanding speaker is very well balanced, its bass reaching down to just about 50 Hz. Again, toe-in toward the listening position will achieve the most linear high frequency response. The impedance response of the Concept 40, while relative easy-going, is not quite as linear as that of the compact Concept 20 speakers, but the timing, measured in the step response, is practically identical.

STEREO-TEST

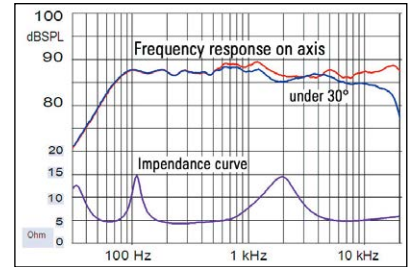
SOUND QUALITY 65%
PRICE/PERFORMANCE
 ★★★★★
OUTSTANDING

Q ACOUSTICS CONCEPT 20

Pair starting from € 500
 Dimensions: 17x26x26.5 cm (WxHxD)
 Contact: IDC Klaassen
 Phone: +49 231/9860285
 www.idc-klaassen.com
 Warranty: 5 years

Extremely agreeable, crystal-clear, and even-tempered compact speakers: painstaking construction and know-how ensure enormous value, in the form of spectacular musicality and precision.

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimum impedance	4.5 Ω at 260 Hertz
Maximum impedance	15 Ω 115 Hertz
Nominal sound pressure (2.83 V/1 m)	89 dB SPL
Power for 94 dB (1 m)	5.8 Watt
Lower cutoff frequency (-3 dB)	66 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 0.3 0.1 %

LAB COMMENTS

Measured on its axis – again, would toe-in the speakers slightly to ensure the listener is on-axis – the frequency response is very balanced, which backs up our impression of a neutral sound. Despite its compact dimensions, the speaker can reach down to 70 Hz, while impedance response makes life easy for amplifiers – it never exceed 15 Ohm – as does 89 dB efficiency. The step response, without noticeable reverberations or resonances, delivers good timing.

STEREO-TEST

SOUND QUALITY 79%
PRICE/PERFORMANCE
 ★★★★★
OUTSTANDING

ROSSO FIORENTINO – FLORENTINE SOUNDS

Compared to the somewhat prosaic names of its competitors, the Italians are ahead of the game with „Elba“ and „Giglio“..

In terms of name recognition, small manufacturer Rosso Fiorentino cannot compete with the rest of the field, but has the distinct advantage that its name already sounds like music. And after exhaustively testing the two pairs of its speakers which entered this contest, we can confirm that name is no empty promise.

More about that later, but let's first take a closer look at the two speakers, which are of course actually made near the Italian city from which they take that melodic name. Developer Francesco Rubenni, who learned his trade in England, has designed unusually stiff and well-insulated cabinets, made from high density fibreboard (HDF) with strategic internal bracing and rear venting bass reflex ports, and with aluminum, rubber, and leather around the two drive units. The drivers themselves are

very similar in terms of efficiency and are manufactured to Rubenni's specification by Scan Speak, thus avoiding a lot of tedious design time in 'making them work'. The components in the crossover, which works with twelve decibels of slew rate per octave, are of extremely high quality, including the use of Mundorf capacitors – all part of the goal of creating a technically clean and at the same time non-fatiguing sound.

No speaker is an island

There are obvious similarities between the two speakers: like its little brother Giglio, the floorstanding Elba was named after an island in the Mediterranean, and while the smaller speaker is a two way, using a 25mm soft-dome tweeter and a 15.5cm mid/bass unit with a coated glassfibre cone, the Elba adds a second woofer, this one covering the lowest bass frequencies below 60 Hz. That makes Elba a 2.5-way design and, while the smaller speaker has a single bass reflex port mounted high in its back panel, the larger has two, arranged behind the midrange and bass units. Towards the floor, Elba's decoupling plate with very solid spikes and lock nuts ensures the correct distance and unadulterated reproduction – at least that's what the producer promises. The final sound balance adjustment of the speakers is performed in an acoustically optimized environment at the company's castle at the gates of Florence. During this process, work on the crossover continues, as well as on the reinforcement of the housing, while other impressive touches are the use of van den Hul silver-coated OFC cable for internal wiring, and custom-made solid copper terminals for the speaker cables.

And this attention to detail sounds pays off while Giglio (as the largest of the compact speakers here) is quite hungry for power, it's overall still a good-natured



speaker with a very balanced impedance response, making it a feasible choice for use with valve amplifiers – or at least reasonably powerful valve amplifiers!

The larger Elba speaker is still a little bit more complicated in terms of its demands on the amplifier, but here, too, all technical parameters still lie in the well-behaved range.

A certain something

If you happened to be on the way to the sound booth when the Florentine speakers were in the STEREO 'house', you would have got the sense that something unusual was about to happen – something exciting, something that would simply suck you in. Yes, Eva Cassidy's „Ain't No Sunshine“ might have sounded a tad too spacious and very slightly indifferent but – much more importantly – her charisma was richly reproduced; so you could really feel why this singer still has a cult status such a long time after her death. What the Giglio displayed in the lower range was also above average: cleanly contoured double bass, with a clearly apparent size difference to cello, and so dynamic. Its big brother, driven by the Exposure 3010, had a hard time setting itself apart.

In our 20 sqm sound booth the larger speaker had – at least on first acquaintance – a difficult time exploiting its theoretical advantages: maybe there was a hint less turbulence, perhaps the bass had a slight extra kick of energy, but in terms of timbre and space an even draw – at a very high level. In fact only when listening to them for a long time, partially with bass-heavy music and at higher volumes, was Elba able to pull away from its little sister. A clear case of an extremely musical family!

Michael Lang



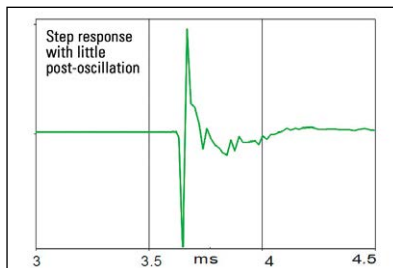
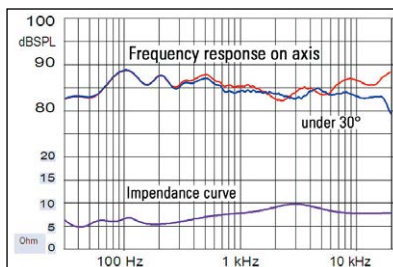
▲ The fleet-footed "wings" on the Q Acoustics standing speaker really make them more stable

ROSSO FIORENTINO ELBA

Pair € 2850
 Dimensions: 24 x 105 x 29 cm (W x H x D)
 Contact: WOD Audio
 Phone: +49 6187/900077
 www.wodaudio.de
 Warranty: 5 years

30 kilos of heft hint at the sturdy construction of the Elba – inside and out. Not quite neutral in sound but enchantingly musical!

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	5 Ω at 41 Hertz
Maximum impedance	10 Ω at 3000 Hertz
Nominal sound pressure (2.83 V/1 m)	85.8 dB SPL
Power for 94 dB (1 m)	15.2 Watt
Lower cutoff frequency (-3 dB)	43 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 0.3 0.1 %

LAB COMMENTS

The room frequency response is a bit uneven but not to the point of concern, the step response is good with only tiny reverberations, and the efficiency moderate. Amplifiers will have hardly any problems with it since the impedance response is so well-behaved, and the bass goes down deep and is quite clean. The workmanship is high-quality except for the cheap, non-color-coded terminals, while the package includes very good spikes. Again, these speakers benefit from toe-in.

STEREO-TEST

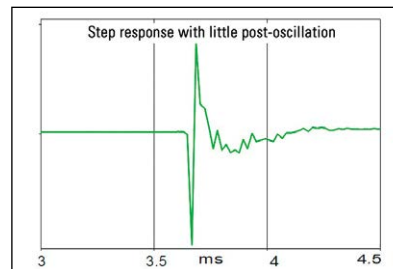
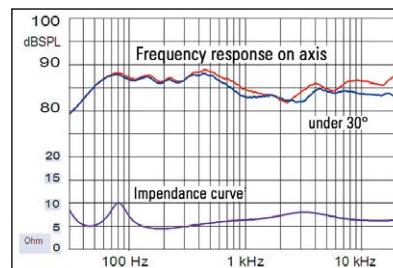
SOUND QUALITY	70%
PRICE/PERFORMANCE	
★ ★ ★ ★ ☆	
EXCELLENT	

ROSSO FIORENTINO GIGLIO

Pair about € 1800; stand € 650
 Dimensions: 24 x 42 x 29 cm (W x H x D)
 Contact: WOD Audio
 Phone: +49 6187/900077
 www.wodaudio.de
 Warranty: 5 years

This is a relaxed, slightly idiosyncratic but skillfully balanced and pleasant representative of the compact speaker group. It even shines at medium volumes, producing very credible music, and in many cases makes large speakers redundant.

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	4.6 Ω at 190 Hertz
Maximum impedance	10 Ω at 80 Hertz
Nominal sound pressure (2.83 V/1 m)	84.2 dB SPL
Power for 94 dB (1 m)	25.7 Watt
Lower cutoff frequency (-3 dB)	48 Hertz
Distortion at 63 / 3k / 10k Hz	0.8 / 0.2 / 0.1 %

LAB COMMENTS

The frequency response of the Giglio is no masterclass but its sound betrays the measured values with moderate toe-in. With just over 84 dB efficiency at 2.83 V, the speaker needs some driving, although the impedance is amplifier-friendly: a few extra Watts won't harm at all.

STEREO-TEST

SOUND QUALITY	87%
PRICE/PERFORMANCE	
★ ★ ★ ★ ☆	
EXCELLENT	

DIAMONDS ARE FOREVER

We grew up with Wharfedale's E series but the new generation of the 35 year old „Diamond“ line is something else.



The name Wharfedale is legendary. It denotes one of the oldest HiFi manufacturers - period. The brand founded by Gilbert Briggs in 1932 was already causing a stir in the 1950s and 60s by comparing live demonstrations with reproduced music – often in congenial cooperation with Quad: I still remember that I saw Charly Antolini live on the drums 30 years ago in Düsseldorf – and then a deeply impressive demonstration of the highly efficient E-series.

That was a long time ago, but recently we were thrilled to hear the little Diamond 220 together with inexpensive Cambridge audio electronics – especially because its musical virtues are at odds with a very affordable price of just € 300 per pair. And now we can focus on the floorstanding speaker of the new line, the 230, which is interesting in that, while it reaches about 12 Hz lower than its compact sister (as expected), its

measured efficiency is almost identical.

In fact, only when viewed over the entire amplitude frequency response does the 230 show a bit more efficiency, but then the horn-loaded tweeter is the same in both speakers, as is the design of the mid/bass and bass drivers (although in different diameters). In the smaller 220 the 25mm soft-dome tweeter is partnered with a 13cm mid/bass driver; in the 230 floorstander it finds itself in the company of separate mid and bass units, both of 16.5cm diameter.

According to Wharfedale, the drivers were revised compared to the successful Diamond 10 line, with changes to the geometry and corrugation as well as stronger magnetic 'motors' wherever it seemed necessary. Even the woven Kevlar membrane was questioned, but eventually retained, while after extensive listening sessions, the tweeter received a ferrite magnet – according to Wharfedale not because it is cheaper but because it clearly sounded better than the neodymium-type. The crossover points were also revised, and the reflex openings optimised.

Sandwich housing

While Wharfedale does not use the kind of high-tech gel found in the QAcoustics speakers, it also uses multi-layer walls to „shut up“ the housing as much as possible through a combination of different materials. In fact, the sandwich technology here was derived from the higher-priced Jade rage and now simplified on MDF and particle board for the Diamond line, the different characteristics of the two materials providing the damping – it's still remarkable technology for speakers firmly in the budget price class, not that you'd be able to tell from looking at them. In fact, the Diamond 220 at € 300 is the by far most affordable pair of compact speakers here, and the 230 at € 1000 Euro per



pair the most lowest-priced floorstanding speaker in the test field

The subtle diminution in the treble gives an intentional pleasantly reserved tendency, and there a greater high-range decrease off-axis and a smooth response across the frequency range – all of these combining to promise a similar timbre from both speakers. It also informs the overall STEREO recommendation to toe-in both speakers a little towards the listener.

The compact speaker 220 reproduces both voices and natural instruments in an agile and very pleasant manner, sounding well defined with a trace of warmth and body and no excessive treble enthusiasm. The bass is always well-contoured and crisp, its spaciousness wider than it is deep. The more voluminous 230, however, delivers a clearly stronger bass and is a little more forceful in the high frequency range, making it more ‘obvious’. At € 1,000, this is certainly a good 2.5-way speaker, but it did not quite reach the consistency of its little sister in the STEREO sound booth – not least as it didn’t quite control its deeper and stronger bass as well as the does the 220 handle its low frequencies.

Surprisingly, here it turns out that the compact speaker, for a measly € 300, is the true defender of the family honor, and does so with flying colors. It sounds great and is perfect for beginners or as a step up for mini systems – and not only thanks to that low price.

Tom Frantzen



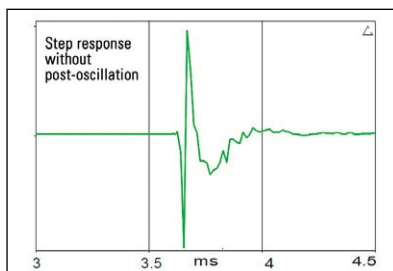
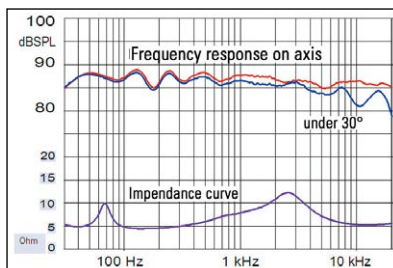
▲ For a € 300 speaker, the work put into the cabinet of for the small Wharfedale is enormous.

WHARFED. DIAMOND 230

Pair € 1000
 Dimensions: 19.6 x 96 x 33.4 cm (WxHxD)
 Warranty: 5 years, Contact: IAD Audio
 Phone: +49 2161/617830
 www.iad-audio.de

The large Wharfedale sounds good: it's balanced and neutral with powerful bass and a punchy overall character. However, since the bass is just a tad on the fuller side, the speakers should be placed carefully (ie away from walls) and combined with leaner-sounding, well-controlled electronics.

MEASUREMENT RESULTS



Minimum impedance	4 Ω at 220 Hertz
Maximum impedance	17 Ω at 2400 Hertz
Nominal sound pressure (2.83 V/1 m)	89 dB SPL
Power for 94 dB (1 m)	6.8 W
Lower cutoff frequency (-3 dB)	58 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 / 0.3 / 0.1 %

LAB COMMENTS

The floorstanding speaker delivers a wavy, but overall balanced, frequency response and above average efficiency. That means it will ‘go loud’ even with modest amplification – even louder than the 220 at the limits. The step response is almost identical to that of the compact speaker. In effect, the 2.5-way 230 could be viewed as a compact speaker with additional woofer ‘capacity’ to support the lower range. The impedance response is mainly good-natured and relatively flat, but we wouldn’t recommend the use of a tube amp: the 230 needs to be kept on a tight rein to play nicely.

STEREO-TEST

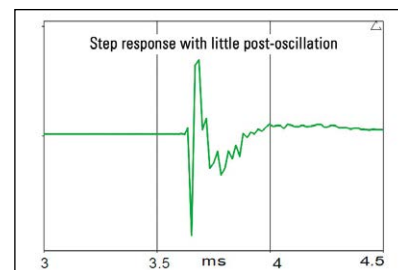
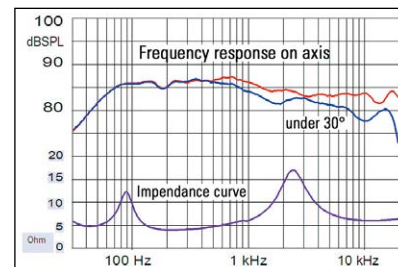
SOUND QUALITY	61%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	

WHARFED. DIAMOND 220

Pair € 300
 Dimensions: 17 x 32 x 26 cm (W x H x D)
 Warranty: 5 years
 Contact: IAD Audio
 Phone: +49 2161/617830
 www.iad-audio.de

Relaxed, slightly warmly balanced, and pleasant representative of the compact speaker group, it even shines with low-powered amplifiers.

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	4 Ω at 220 Hertz
Maximum impedance	17 Ω at 2400 Hertz
Nominal sound pressure (2.83 V/1 m)	89 dB SPL
Power for 94 dB (1 m)	6.8 W
Lower cutoff frequency (-3 dB)	58 Hertz
Distortion at 63 / 3k / 10k Hz	1.0 / 0.3 / 0.1 %

LAB COMMENTS

The axial frequency response of the Wharfedale is quite linear and thus balanced, the very slightly decreasing high frequency range having almost no effect as long as the speakers are slightly toed-in towards the listener. 89 dB efficiency at 2.83 Volts, puts it clearly above average in terms of sensitivity, and it's also modest in terms of impedance, meaning it can be driven well by weaker amps. The step response is good.

STEREO-TEST

SOUND QUALITY	73%
PRICE/PERFORMANCE	
★★★★☆	
EXCELLENT	