DYNAUDIO

Magazine

New Contour New legend

Meet the team who improved on perfection

Issue 01

System masterclass

Learn how to listen and set up your speakers like the professionals

Active or passive?

Everything you need to know to choose your next system

Inside the studio

We go behind the scenes at London's world-famous AIR Studios

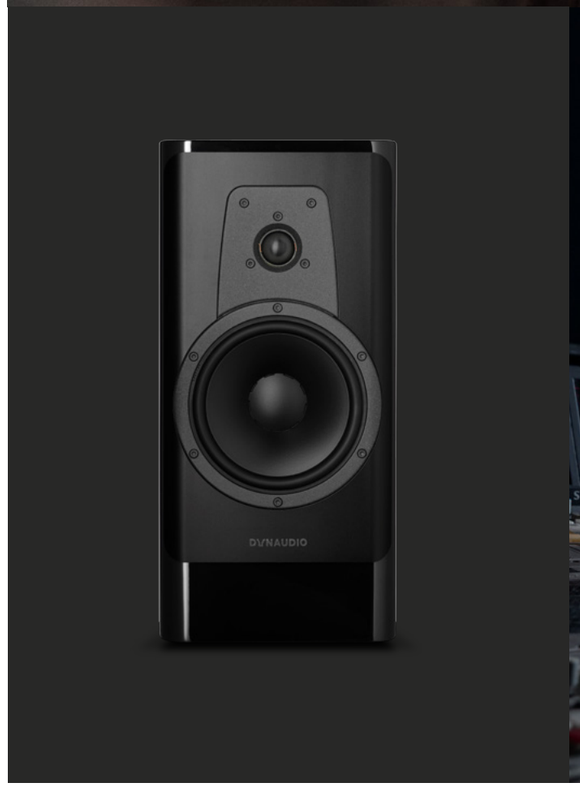
Hello

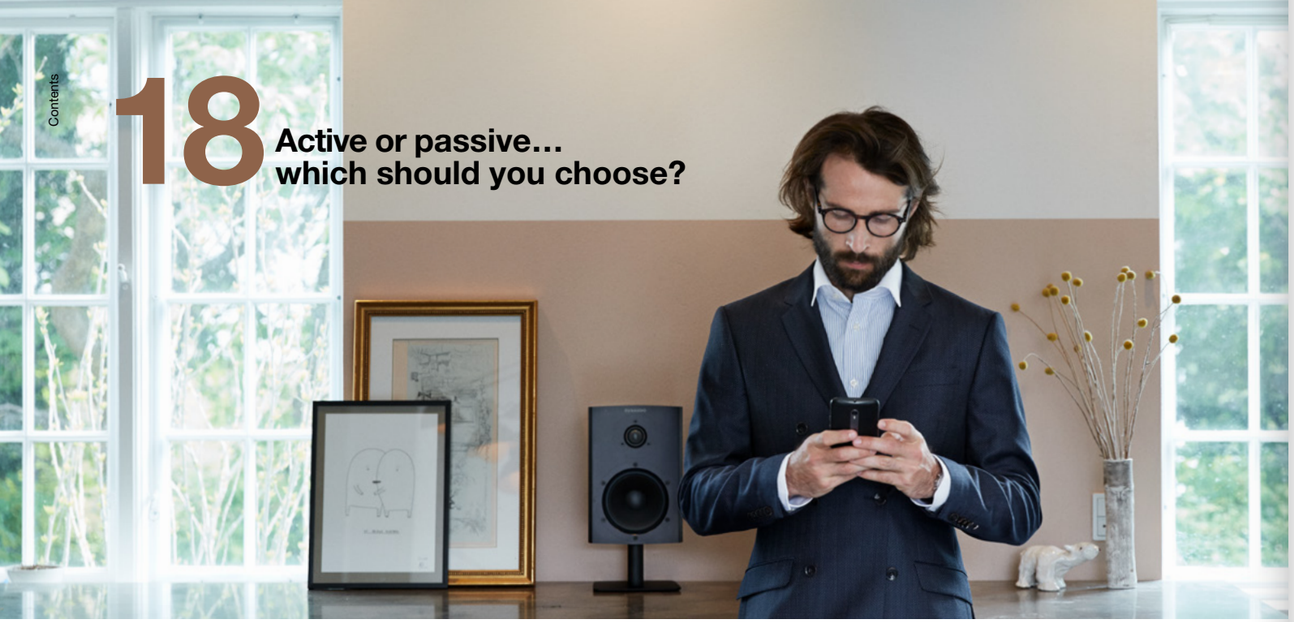
Welcome to Dynaudio Magazine.

Twice a year we'll be bringing you everything you need to know about our latest speakers – plus music and movie reviews, exclusive features and interviews with musicians and recording studios, how-to tutorials and more.

We'll take you behind the scenes in our factory, so you can find out how the magic happens. We'll share hints and tips from our experts on getting the most out of your hi-fi or home-cinema system. And we'll show you a few surprises, too (like our robot…. yes, we have a robot. It's huge.)

Let's do it.





Contents

Made in Denmark

A company like Dynaudio doesn’t emerge fully-formed. It takes a clear philosophy – an enduring one – to guide it

Back in 1977 Dynaudio’s founder, Wilfried Ehrenholz, decided that the off-the-shelf speakers he’d been listening to weren’t telling the whole truth.

Dynaudio started out by putting drivers made by other companies into tweaked off-the-shelf cabinets, with crossovers made in-house. But they still weren’t Right: it wasn’t *all* made in-house. And we all know there’s only one way to get something Right if no one else can do it…

Dynamic duo
Dynaudio founder Wilfried Ehrenholz and Mark Thorup (Dynaudio employee number four) are the men behind some of the most iconic speakers of the past 40 years

“Whatever I do, I want to make a perfect thing. I talked to a lot of other engineers at the time, and I could see how limited their understanding of speaker technology was,” says Wilfried. “So we did it ourselves.”

That obsession with The Truth set them on the path to Right-ness.

They began in Skanderborg, Denmark. It’s a small town by a lake; you’d like it, it’s lovely.

And because there isn’t an awful lot to do in Skanderborg, they turned their attention to making the most honest speakers possible. That meant total transparency: simply reproducing the music that was fed to them from the original performance.

The drivers available at the time just weren’t good enough, so they built their own – but it wasn’t just a test-the-water-and-dive-in job. They did their homework.

Dynaudio was always striving to reach the next level; a level its established competitors – some of whom were leviathans of the hi-fi industry – either couldn’t get to, or hadn’t even realised existed.

Their goal? To stop picking apart frequencies and just… sit. Listen. Enjoy. “If a musician expresses what’s in the music, when you listen to it you aren’t analyzing it, it’s just emotion,” Wilfried says.

That philosophy – that pursuit of truth through emotion – permeates the entire company. There’s always another level to hit. Head of R&D Mark Thorup and Wilfried have been working side by side for decades – and they still agree on one thing: they’re living their passion and making a business of it. “We’re not doing it because we must. We’re doing it because we can,” says Mark.

“I’m very proud that we kept all our principles from the beginning; we didn’t have to change anything. Most concepts we started are still valid after 40 years, and I think this is very impressive,” Wilfried says.

“When I think back, I can’t understand how I have been so brave! When we started, I was only 22 years old, no experience, no background, just finished my studies – but I never had any doubt that we would be successful. We never did anything ›

Designed and assembled in-house
Left: The MSP cone is formed in one piece – even the dust-cap
Bottom left: Our original factory in Skanderborg (1977)
Bottom right: Hand-winding a precision aluminium voice-coil

We're a fussy bunch. That's why we design, develop and engineer all the stuff we make at our HQ in Skanderborg

just for the money. Ever. I thought we might build a company with 30, 40 people or so, but it went better than I thought!" It's always been this way, ever since we started in one building in 1977, with a handful of employees. Now we have nearly 300… and they're all fussy. Just as it should be.

Our people are the key to everything we do: they know exactly how to create quality. They test, and listen, and test, and refine, and listen. They're experts. It means if something isn't right, we can fix it – not just change something else further down the line and hope it solves the problem. We do it at the beginning.

Magnets and wires and robots

The driver sits at the heart of it all. We develop and manufacture them all ourselves – right down to magnetising the magnets and winding the voice-coils. Winding is an automated process these days (although even the robots we built can't escape the eagle eyes or ears of our quality-control people), but at one point even this was done by expert pairs of hands.

We use aluminium wire instead of conventional copper. It's lighter, which lets us double the coil diameter for any given weight. It also lets us use longer windings – which gives the driver longer excursion and better heat dissipation. (And that, in English, means we have tighter control over the sound.)

It's all in the detail
Our high-end Esotar² soft-dome tweeters are precision-coated for the highest quality treble performance

We make our drivers in house too, from our own version of a material called MSP. The whole thing is made in one piece – including the dust-cap – so there's no need for glue. (Although our engineers can tell the difference between different glues just by listening; never let it be said we don't know how to have a good time.)

Building the motors

You might notice our cones are shallower than those of our competitors. That isn't an accident, and it isn't just because we want to be different. It's to improve our speakers' off-axis performance – so the sound you get off to the side is far closer to what you hear out in front… perfect if you have friends over and don't want to give up the good seat.

There are other, less obvious details, too. Some you won't even see – like the spider. That's the springy piece of material that acts as the voice-coil's suspension. It's springy because it needs to control how much the voice-coil moves back and forth, and how much air there is behind the speaker cone. We've improved its symmetry by taking measurements and performing simulations – which improves the sound you hear.

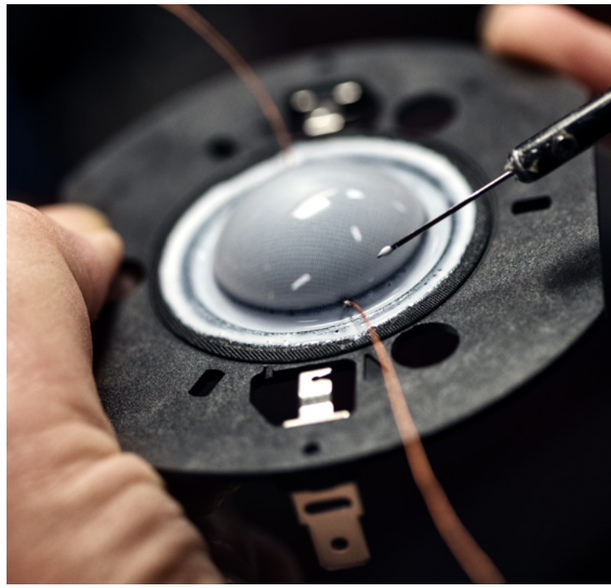
It all sits in the basket. That's the physical housing for the whole driver motor. The car around its engine (or, if you prefer, the Fort Knox around that precious gold). It's just as important – so even though you can't see it, we've spent just as much time refining its design as we have every other part of our speakers. Ventilation is crucial: it's made to reduce turbulence behind the driver, which, again, helps them sound their best.

High-quality high frequency

Then there's our signature soft-dome tweeters. We don't let anyone else near them (apart from our talented team, of course). We've been refining our tweeter designs ever since we started out: geometry, shape, materials, stiffness… even the coating. We use the right amount, in the right places, at the right density, to control roll-off and keep a steady hand on the treble response. Because they aren't made of metal, they have a flatter, more linear frequency response – and, we think, better sound.

But, in the end, it all comes down to our people. They're fanatical about what they do (you really should check out one of our glue-listening sessions; they're enlightening), and they're incredibly proud of what they produce.

And, with our brand-new R&D facility that opened at the end of 2016, they're even more excited about what new stuff they can come up with next…



WE ARE DYNAUDIO – AND WE'VE BEEN MAKING QUALITY LOUDSPEAKERS SINCE 1977. OUR FAVOURITE KIND OF PAPER IS THE BLANK KIND. **OUR FAVOURITE TYPE OF QUESTION IS THE ONE THAT STARTS WITH "I KNOW THIS IS PROBABLY IMPOSSIBLE, BUT WHAT IF WE…"** OUR FAVOURITE TYPE OF LISTENING ROOM IS ONE FULL OF SPEAKERS AND CABLES. AND A SOLDERING IRON. **AND OUR FAVOURITE TYPE OF MUSIC TO LISTEN TO IS… WELL, ALL OF IT.** WE'LL NEVER STOP INNOVATING. WE'LL NEVER STOP LEARNING. WE'LL NEVER STOP STRIVING TO BRING YOU TOTAL TRUTH IN SOUND. AND WE'LL NEVER STOP LOVING MUSIC. **WE ARE DYNAUDIO – AND WE CAN'T WAIT TO SHOW YOU WHAT WE'VE GOT UP OUR SLEEVE.**

WHAT HI-FI? AWARDS 2016

PRODUCT OF THE YEAR
Best standmount speaker £400-£800
Dynaudio Emit M20

Winning formula
The UK's legendary *What Hi-Fi?* magazine made the entry-level Emit range Product of the Year

Emit

Who would've thought 'entry-level' could be so good?

Just because something sits at the introductory end of our loudspeaker range, that doesn't mean we've made any compromises when it comes to sound quality. We just can't bring ourselves to do that.

Instead, we've gone above and beyond to make sure that every speaker in the Emit range can be easily paired with different amplifiers and AV receivers. We designed them to be easy to position in your room, and we made sure that they can all be used as part of a stereo or surround-sound system.

Come on in.

Flexible placement
We've designed the Emits to sound just as great wherever you want to put them

Make no mistake: we've poured just as much enthusiasm, knowhow and innovation into our Emit range as we have into our ultra high-end Evidence loudspeakers (see p54). We don't believe in cutting corners.

Take a close look at a pair of Emit speakers and you'll find the same materials in their drivers as you'll find on every other model in our range. You get the same Magnesium Silicate Polymer for the mid/bass drivers (a material we developed in-house in our Skanderborg factory), the same philosophy behind the precision-coated soft-dome tweeters, and the same lightweight aluminium voice-coils for greater precision, power-consistency and control.

And they've been designed, engineered and tuned by the same people who've produced some of the most cutting-edge, high-end loudspeakers of the past 40 years.

You're in good hands.

Emit M10

Don't go assuming that a compact speaker has small-scale sound. The M10's 14cm MSP mid/bass driver and 28mm soft-dome tweeter team up with a first-order crossover and a forgiving linear 6 ohm impedance that lets them play nicely with pretty much any amp you plug them into. The tuned bass-reflex port and long-throw driver are optimised for smaller and mid-size rooms, and our designers have made sure they'll still work shoved up against a wall or on a shelf – because they know not everyone has (or wants) a dedicated listening room.

Emit M20

Move up a step in size and you get a 17cm mid/bass driver designed to fill mid-size and larger rooms. The 28mm soft-dome tweeter remains, of course; we've spent 40 years working on our tweeters, and until one of our engineers rushes in brandishing something revolutionary and shouting "I've done it!" (which, admittedly, does sometimes happen), we see no reason to change.

Because the M20s are a little bigger, we recommend putting them on stands (you can see the matching Dynaudio Stand 6, among other accessories, at *www.dynaudio.com*), and giving them a bit of space behind to breathe.

Emit M15C

Emit M10

Emit M30

The M30 floorstanders share the same DNA as our top-of-the-line loudspeakers. Their twin 17cm MSP bass drivers each feature a large 75mm aluminium voice-coil (larger voice-coils mean more windings, which means more control over dynamics, detail and finesse), and their 28mm soft-dome tweeters have rear damping chambers for even greater precision. It's the sort of thing you might expect to see in much higher-priced speakers. And it's the sort of sound you might expect, too.

The M30s are designed to work just as well in a stereo set-up as they are in a multichannel system.

Emit M15C

It's been said that up to 80% of the movie-watching experience is down to its sound. And when you're watching a movie using a surround-sound system, most of it comes from the centre channel. We've made sure the M15C can live up to that kind of pressure. Two 11cm MSP drivers and a 28mm soft-dome tweeter handle the business end, while the angled centre base lets you position the speaker for listening on a sofa. You can also put it flat on a low sideboard, or fix it to the wall with a special Dynaudio mounting bracket.

Emit M30

Dynaudio Home Excite

Excite

**Elegant, refined and versatile…
and they pack a serious punch.**

Use them in stereo. Build a multichannel system. Even go active. High-quality furniture-grade cabinets – painstakingly assembled and finished by experts in Skanderborg – plus uprated crossovers, coated soft-dome tweeters and new long-throw mid/bass drivers, set Excite apart when it comes to getting the most from your music and films.

After all, the clue’s in the name…

Excite X34
Two 14cm long-throw mid/bass drivers and a 28mm tweeter in a striking floorstander make a strong visual and sonic statement

Systems grow and change over time. We know you might not start off with a full-fat multichannel system (or maybe you will, in which case step this way). We know you'll add to your set-up, subtract from it and swap out various components, cables and accessories over time.

That's why we designed Excite to be able to roll with the changes you might want to make. We've tuned the speakers so they'll play nicely with almost any amplifier you pair them with: their linear 8 ohm impedance and advanced MSP drivers (a material developed in our own labs) see to that. And they're available in five sizes – so there'll always be one right for your living or listening room.

The smallest, the X14, has been fitted with a new 14cm long-throw mid/bass driver for greater depth and power (we think you might be surprised by its punch), while the short distance between it and the 28mm coated soft-dome tweeter offers improved timing. The X14 is versatile enough to put on stands (we recommend the Dynaudio Stand 3X), bookshelves or sideboards (check out the SF 1 speaker foot for an elegant way to place them there).

Move up a size to the X18 and you'll get a 17cm mid/bass driver alongside the 28mm tweeter, plus a greater cabinet volume for even more low-frequency potency. It also uses our celebrated lightweight aluminium voice-coils and powerful Esotec+ magnets for greater precision, punch and control.

Take the floor

Want to make more of a statement? You can choose between three sizes of floorstanders. There's the slimline two-way X34 with twin 14cm long-throw MSP mid/bass drivers and a 28mm tweeter; the three-way X38, which puts two 18cm woofers and an 14cm midrange driver under the tweeter; and the uncompromising three-way X44.

At 1.2m tall and packing two specially developed Esotec+ 20cm woofers alongside its 14cm midrange driver and 28mm coated soft-dome tweeter, the flagship of the Excite range is perfectly capable of waking the neighbours several houses over (not that you would, of course, we're sure…).

Why midrange drivers? Because they further improve clarity and imaging – even in larger rooms and at longer listening distances. Precise crossover tuning ensures they work in absolute harmony with their bass- and treble-focused cousins, too.

Excite X38
Bigger drivers, bigger sound, bigger fun

Excite X24 Center speaker

Seamless design
Magnetic grilles give your speakers a cleaner look

And there's more…

If you want to go active, there's the X14A. It's based on the passive model, but contains its own powerful digital amplification – one 50W amp for the tweeter and another for the mid/bass driver. We've matched each amp specifically to the driver it powers, so you don't have to worry about system-matching or interconnects, and you can even tell the speakers where they are in the room (in a corner, in free space and so on) to let them fine-tune their sound for you. All you need is a source.

Completing the range are two centre speakers: the X24 and X28. Two 11cm mid/bass drivers flank the 28mm tweeter in the compact X24, while the X28 ups that to two 14cm drivers. They let you build an Excite-based cinema set-up for pretty much any AV receiver and room.

Excite is all about versatility without compromise. It's a system that grows with you – wherever you go.

How to choose between active and passive speakers

You've probably heard of both types. But what are they? How do they work? And is one kind better than the other?

Some choices are easy. Do you want speakers in natural wood, dark-stain, or white? Big ones or small ones? Do you want Dynaudio? (That last one is a no-brainer, obviously.)

But when it comes to what *type* of speakers you want, the choice can become a little harder. You might have seen that Dynaudio makes two kinds: passive and active. So, what's the difference – and which is best for you?

What are passive speakers?

Chances are you already own a pair; they're conventional hi-fi speakers. You use them with speaker cables, and an amplifier in your system. Passive speakers work using an amplified signal. If the speaker has more than one driver (such as a mid/bass unit and a tweeter), the signal gets split into those low and high frequencies in a circuit called a crossover.

What are active speakers?

Unlike passive speakers, actives don't need an external amp – the amplification is built into the box. In fact, *true* active speakers, like the Xeo and Focus XD ranges, have a dedicated amplifier for each speaker driver.

All you need is a source (which can be analogue, digital or even wireless), and mains power to each speaker. Active speakers – such as our LYD range (see p70) – are often used in professional recording studios.

What are the pros and cons of passive speakers?

Flexibility is a big plus when it comes to passive speakers. You can mix-and-match your cables and amplification – and upgrade them all as funds (and long-suffering domestic partners) allow. They're also typically less expensive than their equivalent active versions.

However, the fact that you need external components means your system will take up more space, and be restricted to the lengths of cable you can run between your gear and your speakers.

Then there's the possibility of interference in the signal path. Our designers spend endless sleepless nights worrying about minimising noise and interference, but the laws of physics dictate that there will always be some wherever you have a length of wire carrying a signal. Crossovers, long cable-runs around the room, and the signal-paths in outboard components all contribute. The effect might be minimal – our designers make sure of that – but it's still there.

What are the pros and cons of active speakers?

The most immediate benefit is that you'll get a neat system – especially if you decide to use your speakers wirelessly. All you need is two mains cables and a source.

Then there's the issue of component-matching. You might spend years tweaking the combination of amp, source, DAC, speaker cables, interconnects and more in a passive system. But in active speakers all that work has been done for you.

Sound foundation
We always start with a fantastic passive speaker before we make it active – so it's authentic from the very beginning

Since each driver has its own amplifier, we've been able to pair them up for the best sound – and then optimise them even further. No compromises here.

There's also less internal wiring because the amps and drivers are so close together. Less internal wiring means there's less possibility of interference getting into the system – and, because of the advanced on-board digital signal processing, more possibility of compensating for what does get through.

All of that means the signal can stay in its pure digital form for longer – only being converted to analogue at the last possible moment, before it's output as physical sound. This means clearer, cleaner audio than you'd get from an equivalent passive loudspeaker.

However, what you get is what you get; you can't upgrade or tweak the amplification like you can with passive speakers. Active speakers can sometimes be heavier than their passive cousins due to the extra components inside, and are typically more expensive too, for the same reason.

So, which is better?

Neither! And yes, we know, we *would* say that – but it's true. It depends on what your budget and needs are. Here's a crib-sheet if you're still sitting on the fence:

Consider active speakers if…

- You want a fuss-free system with minimal wires
- You don't fancy tinkering with external amplifiers
- You listen to a lot of digital music, especially in hi-res formats
- You have limited space

Consider passive speakers if…

- You might want to upgrade your amplifier at a later date
- You've already invested heavily in the rest of your hi-fi system
- You're more restricted in your budget
- You're short on power sockets around your kit-rack

WHAT HI-FI? AWARDS 2016

Stereo speakers
Best active speaker
Dynaudio Xeo 2

Xeo

Cut the cables… not the sound quality. Xeo is the world's first high-end wireless stereo speaker system. And we've poured every one of our 40 years of hi-fi experience into creating it.

You can hook it up to almost any source – your phone, tablet, computer, TV, CD player and more – or make it multiroom with Xeo Hub or Dynaudio Connect.

Advanced DSP filters tailor its sound to your room, and adaptive bass technology and powerful integrated amplifiers send its low frequencies to really surprising depths.

Dynaudio Home Xeo

Sometimes you just want to listen to some music. You don't want to rummage through your shelves (or somewhere on the floor) for a CD, then find the box for the one you left in the player last night… then realise, half a song in, that you actually wanted a different CD. Wash, rinse, repeat.

Xeo frees you from all that. It's a range of wireless speakers that can play music from your computer, smartphone, docking station, network player, CD player, TV, portable device, tablet, video system…

No speaker cables, no amplifiers, no big equipment racks: the only thing you have to do is pick a song from your library and stream it. And your ears will be greeted with the same honest sound that Dynaudio has been legendary for since 1977.

How they work

Xeo speakers are active. That means they contain their own amplifiers and electronics. Each speaker driver in the cabinet has its own amp – specifically matched, individually tuned and precisely optimised to drive that one unit. It also means you don't need to concern yourself with matching other components to the speakers – we've done the hard work for you. (For more information on active speakers, turn to p18.)

They don't need a physical connection to each other, either – one speaker streams to the other wirelessly, so you don't need to trail speaker cables or other connections across the room.

Just plug them into the mains, connect your source and off you go.

Xeo 2: wired, wireless, whatever

You want versatility? Here it is. The Xeo 2s can play anything you stream to them wirelessly via Bluetooth – from any compatible device. They also have on-board physical inputs: digital optical (which can handle 24-bit/192kHz hi-res files), analogue RCA stereo, and analogue 3.5mm minijack.

Control them from the supplied remote control, or using the touch-sensitive buttons on top of the cabinet.

Hook them up them to a Dynaudio Connect box (see p28) via the USB and digital coaxial connections and add wireless hi-res streaming up to 24-bit/96kHz, Spotify Connect, iOS control, multiroom and DLNA support.

But it doesn't end there. We don't believe you should have to change your room layout to get the sound quality you deserve. That's why we've given the Xeo 2s some of our most advanced digital processing technology: these speakers aren't just well

Just plug them into the mains, connect your source and off you go

connected, they're smart too. Mount them on stands; keep them on a shelf; put them in a corner; seat them on the optional wall-brackets for a seamless look. Just tell the Xeo 2s where they are via a rear switch, and they'll optimise their sound for that position (and for the volume they're playing at).

The Xeo 2's 28mm tweeter and 14cm mid/bass driver sit in a solid aluminium baffle and ultra-stable composite housing. It's all designed to minimise unwanted interference – giving the twin 65W amplifiers everything they need to do their work.

And you can upgrade them without upgrading them: our R&D engineers can send out future firmware updates to add new features and functions. (They love to tinker.)

Xeo 4: Pure wireless, pure sound

These two-way, 100W-per-side Xeo 4 bookshelf speakers are purely wireless. All you need is a source and power. Hook them up to a Dynaudio Connect and you'll have access to all your components as long as they have the right connections – be it a turntable, hi-res network player, smartphone, TV, CD player or that weird tape machine you found in the attic. And you can make it all multi-room, too. *Multiroom vinyl?* Yep.

And, like the Xeo 2s, they're happy wherever you put them. Just tell them where they are using the rear control and they'll do the rest – all you have to do is sit back and listen.

Xeo 6: Power and nuance

Want more oomph? You got it. The Xeo 6 floorstanders pump out 150W per side from their twin 14cm mid/bass drivers and 28mm tweeters. Like the Xeo 4s, they hook up to your system (and to other wireless Dynaudio speakers) via the Connect box, and can be controlled from the supplied remote or free iOS app. They have the same position switch for optimising their sound to your room, and they auto-detect your music source too. The Xeo 6s let you take your music up to new, even more powerful levels – while still conveying the artist's honest sound.

Size matters
We've designed a Xeo for every size room – so you can build a true wireless multiroom hi-fi system

All your music… instantly
Your source is probably already right there in your pocket. Stream via Bluetooth and put a world's worth of music at your fingertips

Wireless, hi-res and active
It's the holy trinity: ultimate performance without compromise. Every part of the Focus XD range is specifically optimised to keep the music digital until the moment it reaches the driver

Dynaudio Home Focus XD

Focus XD

No amplifier. No speaker cables. No compromise.

The Focus XD range is a complete hi-fi system… without the clutter of a complete hi-fi system. These high-end active speakers bring true high-resolution wireless streaming, from every conceivable source, to your home.

Send in a digital signal (wired or wireless, it's your choice), and it'll stay that way right up until the last possible moment – meaning it stays pure all the way from the recording studio to the speaker driver.

There's no clutter, no fuss… and no catch.

You're welcome.

When we set out to design the Focus XD line, we had one philosophy and one goal: keep the signal pure for as long as possible… and make the best active speakers ever.

So, because our R&D engineers aren't the type of people to back down from a challenge like that, that's exactly what they accomplished.

Focus XD is the pinnacle of Dynaudio active speaker tech. Each individual drive unit is powered by its own tailor-made digital amp. And running the show is cutting-edge digital processing technology capable of handling full-fat, 24-bit/192kHz hi-res files.

All the speakers in the range share common controls and connections – so if you want to mix-and-match, you can. There's digital coaxial in and out, plus analogue input (with adjustable sensitivity), as well as a seven-position control for fine-tuning the speakers' placement in your room.

And if you add the Dynaudio Connect box, you get digital optical, another digital coaxial and RCA and 3.5mm analogue inputs – plus mini-USB (which can stream 24-bit/96kHz files), aptX Bluetooth and Wi-Fi connectivity (including Spotify Connect and DLNA).

Full hi-res support
Free your high-quality files from their computer prison. This is how they're meant to be heard…

The Focus XD's firmware can even be upgraded when our engineers have another Eureka! moment (they get them a lot). In fact, that's exactly what's just happened. In the 2017 version, not only have they redesigned the crossovers and found a way to use less processing (for an even cleaner sound), they've managed to extract more volume from the drivers without distortion or compression. And because there's less processing happening there, we've been able to use more in the EQ for even better speaker-position compensation. We've also included tech from our LYD pro-studio monitors (see p70) that lets you tweak overall brightness with a switch on the back.

Use them with your existing system (they'll integrate just fine), build a multiroom set-up (you can use them with the Xeo range too; see p20), or even hook them up to your TV… while getting genuine high-end wireless hi-fi into the bargain.

Focus 60 XD

The 600W floorstanding Focus 60 XDs are the ultimate union of quality, power and performance. With twin long-throw 18cm woofers and a dedicated 14cm midrange driver – both made from our proprietary MSP material – plus our legendary 28mm soft-dome tweeter, they're designed just as much for finesse as they are outright thump.

Focus 30 XD

These compact 450W floorstanders have the same MSP woofers and precision-coated soft-dome Esotec+ soft-dome tweeters as the Focus 60 XDs. Their tri-amp configuration and intelligent digital amplifiers means each driver gets exactly the right amount of the right frequencies, at the right time, to help your music sound exactly as it should.

Focus 20 XD

Dynaudio has spent decades repeatedly redefining the compact loudspeaker – starting with the legendary Contour 1. And with the 300W Focus 20 XD, it's happened again. The MSP driver and 28mm tweeter from the rest of the Focus XD range appear here, too – along with all the authority and control of the larger speakers. It's quality, concentrated.

All you need is a couple of power sockets (and your favourite music)

Control it how you want
You can control the Focus XD range with the included remote handset, the touch-sensitive controls on the speakers themselves, or via the Dynaudio Connect box and your iOS device

Connect

Run one set of speakers, build a multiroom system, go hi-res.
Use a turntable, a CD player, a TV, a streamer. It's your choice.
Just connect…

Dynaudio Connect brings together all the inputs you need to integrate wireless Focus XD and Xeo speakers into your system.

You can hook up any conceivable source – even those old-school analogue ones you haven't brought down from the attic in years – and then stream their playback over your home network to your digital active loudspeakers.

And because it uses Wi-Fi, you can use Spotify Connect to stream from the internet (and not have to worry about busting your mobile data allowance). It also means you can access your own digital files from any DLNA device on your network.

High-quality aptX Bluetooth support lets you stream from any Bluetooth device – including smartphones, tablets and computers, while the digital optical and coaxial inputs accept full-on 24-bit/192kHz hi-res audio files (USB is 24/96). Want to stream wireless hi-res to your Focus XD speakers? No problem: Connect also outputs 24-bit/96kHz over the air.

Total control

Download the free Dynaudio Control app for iOS and you can ditch the remote for the Focus XD or second-gen Xeo. It lets you control both speakers directly, and the Connect itself: flip between inputs (which you can name yourself), change the volume and switch zones in a multiroom set-up.

If this, then that

CD player and AV receiver

Input:
- Line in
- Coax in
- Optical in

Tablet and smartphone

Input:
- WiFi
- Bluetooth
- Aux in

Network player

Input:
- WiFi
- Coax in
- Optical in

Computer

Input:
- WiFi
- Bluetooth
- USB in

Turntable

Input:
- Line in

Cassette / walkman

Input:
- Line in
- Aux in

Mp3

Input:
- Aux in

TV

Input:
- Optical in
- Line in

Inputs
3.5mm analogue
Stereo RCA analogue
Optical digital (up to 24-bit/192kHz)
Coaxial digital (up to 24-bit/192kHz)
Mini USB (up to 24-bit/96kHz)

Wireless
Bluetooth (A2DP, aptX, AAC),
Wi-Fi (Spotify Connect, DLNA)

Control
Dynaudio Control app for iOS

Formats
Hi-res mode for streaming one digital input up to 24-bit/96kHz to the Focus XD; multiroom mode for simultaneous streaming of inputs up to 16-bit/48kHz to Xeo (second-generation) and Focus XD

Close your eyes and see
Relax and just sit back to listen. Don't try to listen with a critical ear at first – you'll pick out far more by enjoying the music

7 ways to listen like the professionals

Want to know how pro engineers put loudspeakers through their paces in listening rooms? You can do it, too.

'Golden ears' are a myth. No one is born being able to pick out what makes one speaker better than another, to know when one component doesn't work with another or to identify that obscure oboe passage that's just about audible under the strings.

It takes practice and attention. But, above all, it takes confidence. And the good news is, if you have that confidence you're already well on the way to being able to listen like the professionals.

Follow these simple tips when you're next demoing a piece of hi-fi equipment – be it a pair of speakers, an amp, a CD player, cables or anything else – and you'll leave knowing you've given it a fair test.

01

Pick music (and equipment) you know

You'll be listening to your own collection on this system, after all – so ditch the demo CD the dealer tries to spin and play something of your own. It doesn't matter what – as long as you know it really well. If you listen to more than one type of music (there's more to life than Peruvian thrash-metal, after all), take discs that cover your whole listening gamut, and make sure you give them all a good couple of tracks each.

If you can bring some of your own equipment to the demo, that's even better. Testing some speakers? Take your own amp and CD player. Taking a look at an amp? Take your speakers along. Your kit will be run in, familiar, and a better benchmark than the unfamiliar gear they might have in the listening room.

02

It's all in the detail

Try to identify key moments in the music you're listening to. That might be a particular guitar intro, the way the bass interacts with the drums in a certain section, the ambience of the concert hall just before the orchestra strikes up, or a wash of effects over a vocal part. Listen to them over and over until you know exactly how they sound. Then compare them on different pieces of equipment – you might be surprised by how many differences you can hear.

03

Listen to the start of notes…

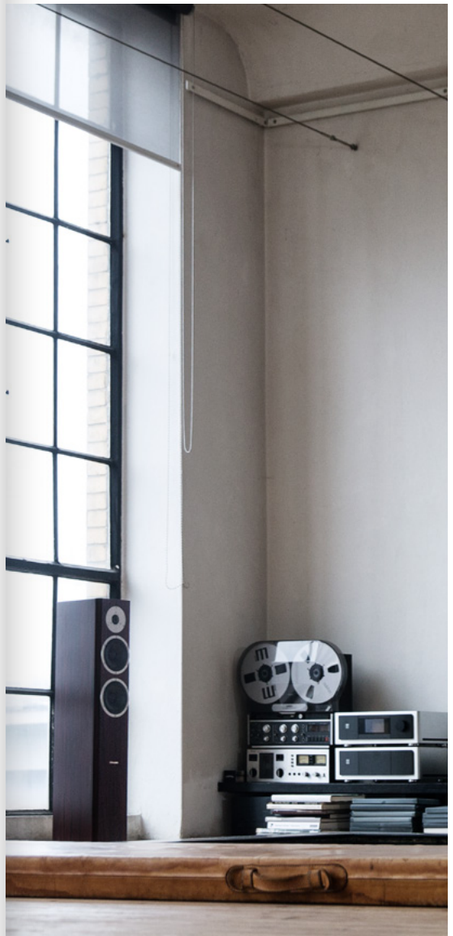
The crack of a snare drum. The 'ting' of a ride cymbal. The attack of a pick on a guitar string. That initial puff of a trumpet note. The start of a word in the vocal part. Can you hear them distinctly or do they seem to lag behind a little? Are they crisp and clear, or woolly and ill-defined?

If you're listening to a piece of soft classical that sounds harsh and brittle on the new components, for example, or a well-produced rock song that no longer sounds as driving as you remember, it's probably down to the equipment's timing (how different frequencies interact with each other).

04

… and the end

The tail of a note is just as important as its attack. Take the ride cymbal: how does it decay after the drummer hits it? Does it sound like a physical, metal, vibrating piece of drumkit? Or does it sound flat and listless? Does it 'fit' the music, or does it tail off too quickly? Try to listen for these longer parts; become aware of how individual instruments sound. It can be tricky at first to identify an individual part in the middle of a song, but persevere and you'll become adept.



05

Don't be starstruck

Bright treble or thundering bass are often an eye-opener when you hear a new piece of hi-fi gear – but they aren't necessarily a good thing. They're show-stopping, sure – but they might get on your nerves over time. That treble might become tiring to listen to after half an hour, or you might notice that the impressive bass is fatter and less controlled than you initially thought. The most important thing is to hear how all the frequencies knit; nothing should stand out. If it does on your first listen, chances are it'll only become annoying after you get the thing home. And that's why it's so important to…

06

Take your time

Don't play one track and judge the kit on a five-minute listen. First impressions do count, of course, but second ones matter more. And third ones. Immerse yourself in the music – just as you would at home. Close your eyes. Recline. Relax and just listen… if you can't pick out the details above in a dealer's demo room (everyone gets stage-fright occasionally), sitting back and just enjoying the music will help you get there.

07

Go with your gut

If something seems 'off' to you, it probably is. Trust your instincts.

Yes, that amp might cost a small fortune, and have VU meters and cool shiny metal all over it – but if you prefer the sound of the one that costs half as much, and looks like it, who cares?

That's the one for you. It's your money – and it's your ears.

Set-up masterclass

How to set up your speakers

Don’t just plonk your speakers down right against the wall and hope for the best. Here’s how you can make them sound their best in your home

Better sound: free
Taking some time and care when setting up your speakers will make them sound even better than you thought they could… and it’s free to do, too

Run in your speakers and they'll sound different – sweeter, subtler, more musical – and you'll notice it

So, you've taken your new speakers (Dynaudio speakers, naturally) out of the box, and you're ready to go. But if you just put them down and plug them in willy-nilly you won't get the best out of them. Follow these tips and you'll get even better sound – and you won't have to rearrange your whole room to do it.

Run them in

When you buy a brand-new car, you're given strict instructions to take it easy for the first few hundred kilometres. The engine needs to bed in, and the moving parts inside it need to loosen up a little from the factory. So you follow the rule-book and, gradually, the car starts to feel better. Even the seats begin to feel softer.

And so it is with speakers. Like car engines, they're mechanical – the voice-coil, spider and diaphragm are all moving parts, and they need to loosen up too. The most straightforward way to get this happening is simply to listen to music for around 30 hours at a higher volume than you'd normally listen at (you don't have to do that all at once, but we totally understand why you might not be able to help yourself with our speakers). After that time your speakers will be operating how our designers want them to. If you want, you can do your own experiment – put them in another room, have a listen, close the door, then leave the music on for three days. When you come back they'll sound different – sweeter, subtler, more musical – and you'll notice it.

Run in your speakers before you get serious with any of the other tips here, because then you know they'll be performing as they should, and their sound won't change drastically after you've put in all the work…

Set-up masterclass

Where to put them

We're assuming you don't have a special acoustically treated listening room containing nothing but a system, a chair and space for two speakers. (Even our engineers don't have those at home, as much as they might beg their partners.) So, marking the floor with tape and using laser pointers and protractors is probably overkill here. You can apply some of the techniques we use in our testing facilities, though.

For example, if the speakers have ports on the back, they'll need a little breathing room. Put on a piece of music you know well, and listen to it for a minute. Then move the speakers in a few centimetres from the rear wall; you'll hear their sound change for the better. Move them few centimetres and it'll improve again. Keep moving them in and listening until the sound begins to get worse again, then walk them back to where they sounded the best. (Don't worry, you won't end up with your speakers right in the middle of your living room.)

You'll probably find you're sitting in an equilateral triangle, with your speakers at two of the corners and you at the third. In an ideal world, your seat will be away from the back wall, too.

Now, experiment with angling the speakers in towards the middle of that triangle. The experts call this 'toe in'; AKA 'a pleasant way to spend a sunday afternoon'. Repeat the listen-tweak-listen-tweak process with your favourite track again, each time angling the speakers in more until they sound their best. How will you know? The soundstage – how 'wide' the music seems to sound – will change. When you've got it right, instruments will appear to sit nicely in the sound mix; it'll be coherent, and nothing will jump out at you from weird directions because of acoustic reflections around your room.

You might also notice that the speakers don't point directly at you. That's OK. They don't have to – we make sure our off-axis performance is every bit as thrilling as the direct sound.

The cables

We could write a whole article on cables (and we will) but for now, we'll stick with a few basic tips. Keep the cable lengths between your amp and speakers as short as you can. Shorter cables means less resistance, less possibility of interference and therefore potentially better sound. Using the same length for each side of the stereo set-up (if you can) will keep things consistent. And, again, if possible, keep the speaker cables uncrossed, and away from mains-power cables.

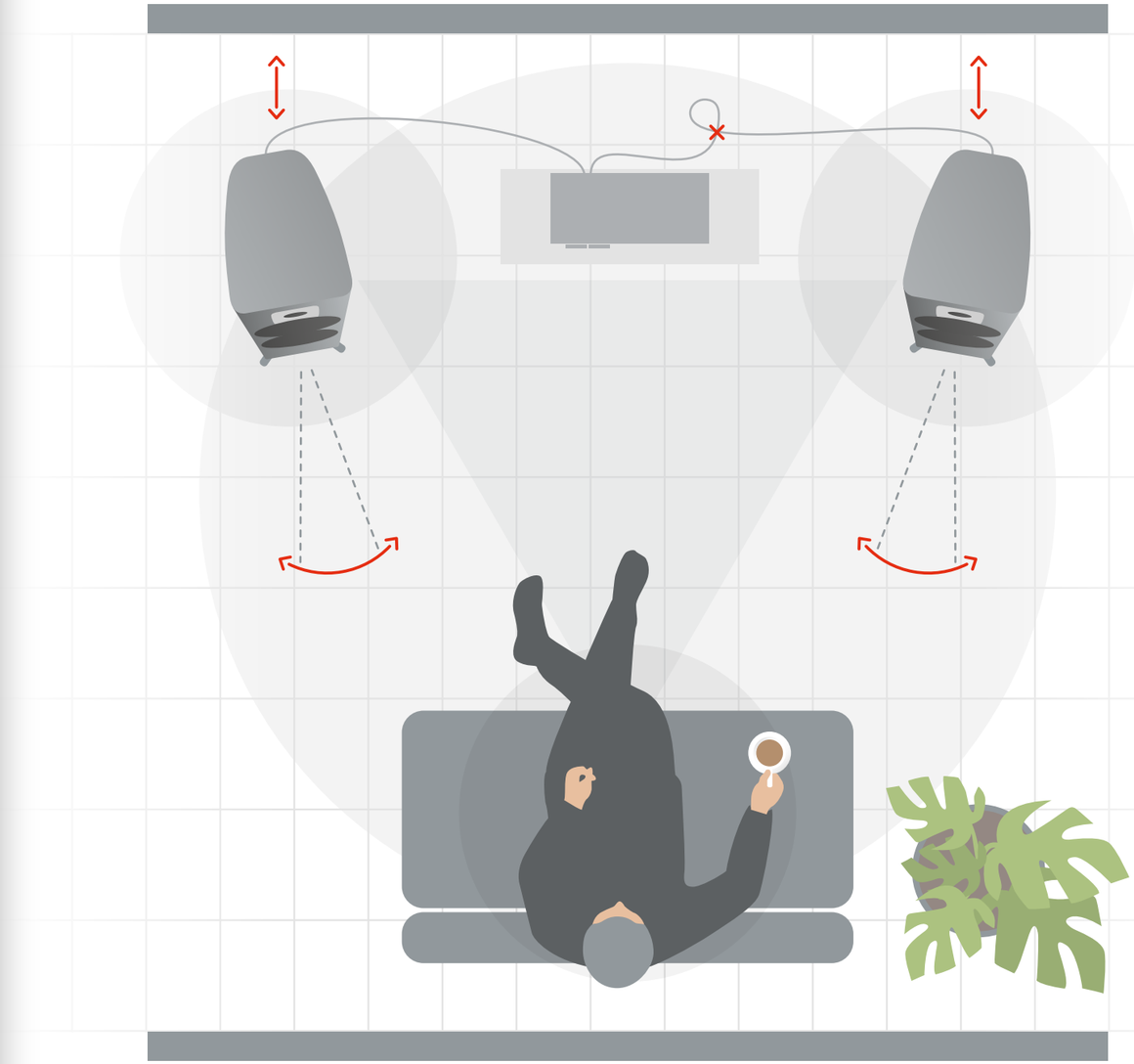
You might have heard people talk about bi-wiring. This is where two cables are used for each speaker – one carrying the low frequencies, and one the high. It's a subject of endless debate. We don't do it at Dynaudio because we'd rather put the effort into making our crossovers as perfect as they can be – it's a matter of pride for our engineers. We're Danes, after all; we like to keep things simple and neat. Plus, it means you only need to buy one set of speaker cables…

Spikes and adhesive putty

Uneven floor? That's what spikes are for. They help you level out the speakers so they're pointing where they should – in both the horizontal and vertical planes.

You might want to think twice about using them on your beautiful hardwood floor (that's where rubber feet are essential – for both your floor and your speakers), but if you're putting speakers on carpet they'll really help. They'll also stop the speaker from swaying around if the carpet pile is deep.

If you're using Dynaudio stands, you might notice spikes on the top plates as well, which keep a firm grip on the bottom of your speaker and help minimise vibrations in the system. If you aren't using our stands (although we'd really like to think that you are), you can give your speakers a helping hand by putting a pea-sized blob of adhesive putty in each corner on the bottom before you mount them.



Here's how to place your speakers

Put on a track you know really well, then move your speakers out from the wall until they sound better to your ears. Ditto with angling them in or out. And don't worry: there are no right answers here, either – it's all about what you think sounds best

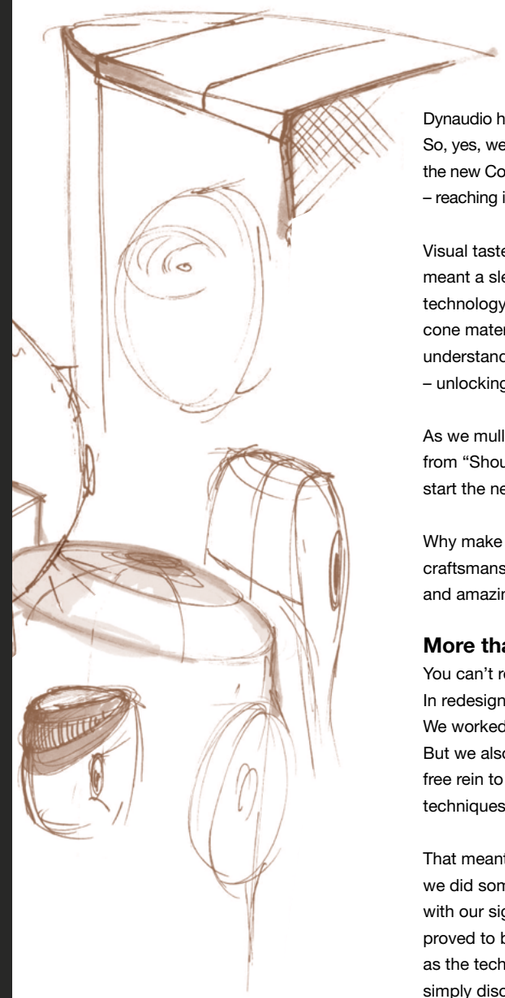
New Contour, new legend

How do you reinvent an acclaimed loudspeaker? Here's how Dynaudio's research and development team approached the new Contour range

It all started with a simple, throwaway question at a quick catch-up meeting: "Should we just stop making Contour and concentrate on a completely new speaker?" You could have heard a pin drop. *Should* we?

The question was dismissed instantly – but another took its place: what would we do if we were to make a new Contour today? A brand-new one? It turned into a very long meeting.

The answers were far from simple. How can we possibly improve something that's been so loved for almost 30 years? What do we have to do to keep the spirit of the original? What if we mess it up?



Dynaudio has never stopped innovating. It's what we love. So, yes, we were daunted – but excited, too. We decided to make the new Contour the foundation for a new line – a new philosophy – reaching into the future. And that meant a total re-design.

Visual tastes have changed – ours as well as yours – which meant a slew of concept drawings would be needed. Driver technology has moved on, so we could use our own MSP cone material in even more innovative ways. And our understanding of psychoacoustics has grown immeasurably – unlocking the potential for even greater performance.

As we mulled over these points, the question changed rapidly from "Should we stop making Contour?", to "When can we start the new one?", to "When can we release it?".

Why make a new Contour? Because we love materials. We love craftsmanship. We love innovating. We love amazing sound, and amazing music. And we love a challenge.

More than the sum of its parts

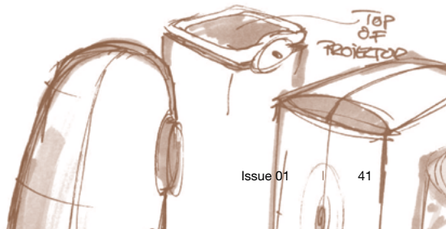
You can't reinvent the wheel. But you can change the spokes. In redesigning the Contour range, we changed a lot of spokes. We worked hard to retain the original's DNA; its character. But we also wanted to provoke – so we gave our teams free rein to experiment with different materials, different techniques and different designs.

That meant scaring ourselves a little sometimes. Like when we did some A/B listening tests on small voice-coils compared with our signature large ones. That's a big step. This time, it proved to be a step too far – they just didn't sound as good as the technology we've been using for years – but we didn't simply discount the idea. We listened.

Then there's the time when Malte Köhn, one of our product designers, rocked up to a meeting with armfuls of sketches (you can see some of them here). "I tried to work with non-traditional colour and material combinations," he says. "But I wanted to keep the Contour's classign design, which is quite edgy and brutal. We turned it into something more elegant and technical." Malte is really proud of his design – and he should be, because that's the one we all chose as a group.

Michael Rohde Böwadt, our brave VP of product management, was the one who took the leash off. "We went very wide in the beginning," he says. "I told them to just make the best drivers in the world. The best cabinets in the world. To approach it all in a different way."

No pressure, then. ›



“Make the best speaker possible”
Our SVP of product-management, Michael Rohde Böwadt, doesn’t mince his words

“It backfired a bit! But it was also very interesting. We got some very interesting results, provoked a lot of discussions, and were able to really zero in on what we wanted to do next.”

One of the things that came out of those discussions was using different driver materials. Ultimately we decided to stick with our tried-and-true MSP – but we told Daniel, Andreas and Danny in our R&D department that we wanted it to sound even better. Their Eureka! moment came when they started varying the material’s thickness across the diaphragm, because it means the whole cone is optimised for the frequencies it’s been designed to reproduce. And it works.

Michael insisted on keeping the metal baffle. It looks nice, after all, and there are some incredibly good acoustic reasons for keeping it. It’s rigid, solid and extremely well-damped (which lets those fancy new MSP drivers do their thing as they should).

But now it’s made from aluminium instead of iron.

We decided on aluminium because we can shape it. You can see that from the drawings. Its chamfer fits with the gently curved cabinet edge, and its milled shape gives a modern feel to complement the Contour’s classic sound.

But it also meant we could bring other details to the party: the driver baskets themselves are chamfered, too. We love how they look, but they also help to reduce diffractions. Good job all round, then.

We even went so far as to have more than one argument about whether the screws should be visible. The “yes” side won, and even our minimalist contingent had to agree that it was the right choice.

In developing the new drivers and crossover, we turned to Jan Abildgaard Pedersen, our CTO. He knows everything about digital signal processing. The Contour is a passive speaker – but we used DSP simulations to settle on how to design the internals. We took those results to our engineers and psychoacoustics guys, said “aim this way”, and they got to work.

When we design, we experiment. We talk. We play. We listen. We don’t simply do what we did before, and we definitely don’t try to make things easier for ourselves.

We got to where we are on the new Contour because we (and you) love the original. And now, the legend can begin again…

A weighty decision
We’ve made the Contour’s front baffle from a solid chunk of machined aluminium – it isn’t just a thin veneer. Its mass gives it incredible stability, which is essential for a top-performing driver

It’s more than the sum of its parts

Tweeter

The sweet-toned Esotar² soft-dome tweeter has been a legend in its own right for years. It’s built in an extremely labour-intensive process – shaped carefully over a form, and then treated with a precision coating. The lightweight aluminium voice-coil is encased in a special magnetic ferrofluid, which works like a shock-absorber and dissipates heat to reduce stress on the moving parts.

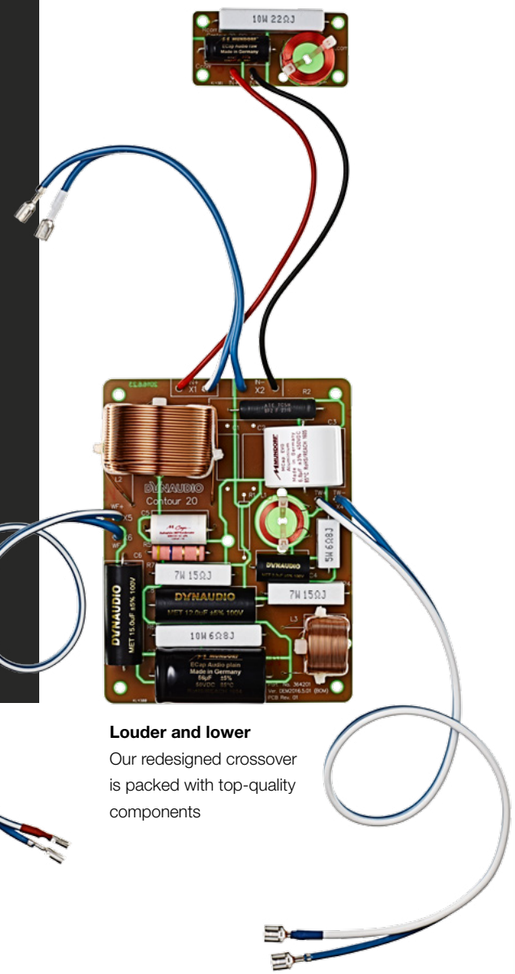
Baffle and basket

The new Contour’s solid aluminium baffle is an evolution from the iron used on the previous generation’s models. It’s not just mounted on the front of the cabinet; it’s *part* of the cabinet: thick, solid, robust and extremely well-damped. The new die-cast aluminium driver baskets are mounted directly to it to form one ultra-stable mass. Everything is shaped to aid the drivers: the edges of the aluminium curve gently into the wooden cabinet. That isn’t for show: it reduces high-frequency diffraction for clearer treble.

Ahead of the curve
The cabinet edges are rounded to help avoid unwanted high-frequency diffraction (and they look nice)

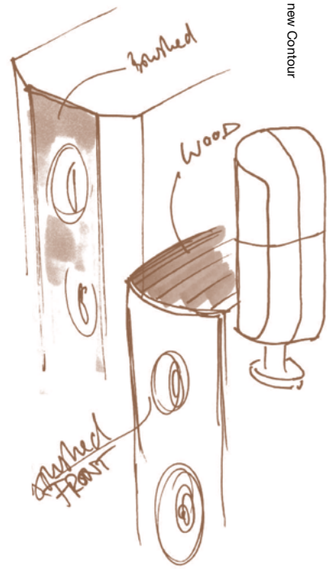
Cabinet

The Contour is the first-ever Dynaudio speaker to have soft edges. Why the curve? Because it looks nice. But it also serves a solid sonic purpose: its edges help reduce unwanted high-frequency diffractions for improved treble – just as the basket does. It also improves off-axis performance. The cabinet is multi-layered for stiffness and stability: that construction, along with new internal bracing, gives the aluminium baffle and its direct-mounted driver baskets an ideal acoustic foundation. Each cabinet takes three weeks to finish, with 11 coats of furniture-grade lacquer and 11 stages of meticulous polishing.



Louder and lower
Our redesigned crossover is packed with top-quality components

More coil windings give us more control over cone movement, which means more control over the sound



Crossover

The crossover takes the signal from your amp and splits it into the frequency bands each driver needs to work at its best. So while you might not see the crossover, you'll definitely hear its effect. We used ultra high-quality Mundorf resistors (which we selected by ear) and a brand-new wiring configuration. It has new audiophile-grade copper air-coils and capacitors; a new low-resonance printed circuit-board; new WBT NextGen™ speaker terminals; a new, phase-optimised design; new overall impedance linearisation… so now you can play even louder, and even lower, at even better quality.

MSP drivers

We're still using the same MSP (Magnesium Silicate Polymer) cone material we developed ourselves, but since the last Contour made its debut in 2003 we've discovered even more innovative ways to use it. It already provides exactly the right combination of stiffness and damping, but now we're also varying the material's thickness across the diaphragm's width. That gave us even more control over the way the cone moves – and, in turn, the sound it produces.

Magnet and voice-coil

A speaker driver is, in effect, a motor. Its fuel is the signal coming from your amplifier. How to get better fuel efficiency? Big, powerful magnets. The magnet, and the wire coil that surrounds it, is what turns the electrical energy of the input signal into the speaker cone's physical motion. A bigger magnet (and a bigger voice-coil) does that more efficiently. We made our voice-coils from aluminium, which means we can make them extremely light – and also larger than the old-style copper ones you'll find elsewhere. More windings give us more control over cone movement, which means more control over sound – even at high volumes and high frequencies. The assembly is rear-vented to improve air circulation behind the cone, and to let it move further. More movement equals more punch.

Totally redesigned
We took everything that made the original Contour so amazing… and then made it even better. New woofers, new cabinets, new crossovers – the list goes on

Contour

When you get a Dynaudio Contour you're up in the big leagues. You can see it from the craftsmanship; you can hear it in the performance. And everyone else can, too.

It's been that way since 1989. The performance of the original Contour dropped jaws all over the world – and each update has done the same over the past 27 years.

Your jaw is about to drop again.

We've moved on since 1989. You've moved on, too. That's why we've applied all our experience, all our expertise – and all our passion – to looking at what made the original so good... and then making it even better.

It's time for a new legend. This is a speaker re-thought, re-designed, re-engineered and re-built for 2017.

This is Contour.

Contour 20
Everything we know about speaker design in a compact, clean and great-sounding package

Contour 25C
The one for movie-lovers. It's the ideal companion to our stereo Contours – and integrates seamlessly for the ultimate in surround-sound

Contour 60
If you have a bigger room (or if you just like to play loud) the Contour 60, with its greater cabinet volume, larger woofers and dedicated midrange driver, is your new best friend

Four models. One single-minded obsession with uncovering the truth in your music. (Also, something that'll make all your friends jealous.)

The Contour range takes everything we know about speaker technology – we're Danes; we know a *lot* – and puts it in four clean and great-sounding packages. One for every room size (or, if you're in a studio flat, one for every neighbour type).

They all use the sweet-toned Esotar² soft-dome tweeter, which has been a legend in its own right for years. It's commonly regarded as one of the world's best-ever drivers – and because it's been such a great friend to so many millions of ears (and a key part of Contours past), we just had to give it another outing.

Designed from the ground up

The woofers, though, are brand-new. They're powered by lightweight aluminium voice-coils and a vented dual-ferrite magnet system, and were created by driver specialists Danny Pasfall Christensen and Andreas Eberhardt Sørensen and their team under acoustic maestro Daniel Emonts. (They can hear differences between alternative glues. We love those guys.)

They're made from MSP – a material we developed ourselves, and have been using in our drivers since 1985. MSP gives exactly the right combination of stiffness and damping – which you'll hear as exactly the right combination of power, finesse and control. Just what a Contour speaker should have. But we've taken it further: we've varied the diaphragm's thickness across its surface for even greater control over its sound.

The Contour 60 has a completely new 15cm midrange driver. Like the rest of our drivers it uses an aluminium voice-coil. It also uses a neodymium magnet system, and was designed using Finite Element Method optimisation techniques. We wanted the Contour 60 to retain that signature midrange sound in a large cabinet, without having to repurpose an existing driver for a job it wasn't designed to do.

Solid aluminium baffle

At Dynaudio we feel there's always room for improvement – and our designers love to stretch their legs (you should see the number of sketches they produced for just this part). This baffle is aluminium, and set into the cabinet. Its chamfer is included in the driver's basket – which not only looks great, but also improves the treble and provides a solid foundation for the drivers to do their work. A solid foundation means improved high-volume performance at low frequencies, too (although your neighbours might not thank us for that).

Contour 30
Power, control and elegance. The Contour 30 has been optimised inside and out

And although we might have changed the cabinet's shape (square is out; curves are in), the new design tips a respectful nod to older Contours. Look at it from the top; you'll see the previous baffle design in its shape. But it isn't just for show – the new shape marries those aesthetics with cutting-edge physics. Its multi-layered construction is extremely well-damped, which means the Contour's sound goes exactly where it's supposed to: forwards.

We've redesigned the internal wiring and crossover, too. You won't see what we've done, but you'll hear the effect: amazingly clear sound, even off to the sides of the speakers. We love it – and you will, too.

And, of course, they all use high-quality materials and finishes. Our factory technicians make sure all Contours are furniture-grade: perfectly built, perfectly finished and perfectly packaged.

Dynaudio Home Confidence

Confidence Platinum

Game-changing design. Cutting-edge acoustic technology. High-end materials and construction. And the sound? Wow…

The Confidence series has been raising eyebrows and dropping jaws since the 1990s – and the Confidence Platinum takes that heritage and quality to another level with new materials, updated components and an even more fanatical attention to detail.

Listen with Confidence
New materials, techniques and the application of new acoustic theories means ‘great’ just got greater

Confidence C1 Platinum
Don't let its compact size fool you – we thought big when it came to sound

Every Confidence speaker is handmade in Denmark from furniture-grade materials

Welcome to the next level. The original Confidence range established a benchmark for high-end loudspeakers when it sashayed out of our factory in the 1990s – and now, with the Platinum edition, it's setting another.

Thanks to Dynaudio's innovative DDC technology, the legendary Esotar^2 tweeters (now with our precision coating), advanced crossover design, CNC-machined front baffles, custom MSP driver material (and the list goes on), the Confidence Platinums bring you unsurpassed quality, accuracy, finesse and… well, just sheer entertainment.

And then there's the finish. Oh, the finish! Every speaker is completely handmade in our Skanderborg factory from furniture-grade materials. And everything is finished by expert craftspeople: we apply up to 13 coats of lacquer to each speaker – and each pair stays together throughout the process, so we can ensure they match perfectly. We glass-blast the aluminium tweeter plate to offset it against the satin-finish baffle. And we can make the Confidence in any finish you want, if you ask us to.

It's painstaking and involved… and really, *really* difficult. (What can we say? We're gluttons for punishment.)

Dynaudio Directivity Control

Much like motor-racing technology ends up in your family car, we've taken the expertise we've gained from decades of building professional monitors for major recording studios and applied it to home audio.

It's all about compensating for floors and ceilings – which reflect the sound coming from your loudspeakers and introduce distortions and time delays. It's those effects that colour the sound you hear – and while a splash of colour is lovely on the wall, you don't want it in your music.

We utilised Dynaudio Directivity Control (DDC) in the Confidence Platinum C4 and C2 to minimise those unwanted distortions. The vertical symmetrical driver array and sophisticated crossover are designed to reduce the energy dispersed to floors and ceilings by up to 75%. That means more of it comes directly to you in your seat, and makes the speakers far less dependent on the room they're in.

It isn't just a driver arrangement, though: every part of the signal chain is optimised for the technology. Each tweeter complements each woofer in frequency response and phase relationship. Each crossover component is precisely selected for the job. And on the floorstanding speakers in the Confidence Platinum range, we make sure each set of drivers and crossover parts is precisely matched to the other – so they work in tandem.

It also means you needn't acoustically treat your room. (Egg-boxes on the walls are best left to dingy rehearsal rooms…)

Confidence Center Platinum >
Multichannel performance with total tonal consistency

Confidence C4 Platinum v
No compromises were even *thought* about here, let alone made

Confidence C4 Platinum

They stand 1.73m tall. They have two 28m Esotar^2 tweeters with our own precision coating. They use two 15cm midrange drivers and two 20cm woofers – all made from our very own Magnesium Silicate Polymer material. And their ultra-lightweight aluminium voice-coils accompany non-magnetic Kapton formers, high-quality internal wiring and a sophisticated first-order crossover.

The C4s produce utterly captivating sound – from incredibly deep, controlled bass to clear, smooth, detailed highs.

Confidence C2 Platinum

The slimline C2 Platinum adapts our reflection-conquering DDC tech to a more compact floorstanding design. The drivers comprise two 17cm mid/bass drivers, matched to twin 28mm Esotar^2 tweeters – all designed to deliver seamless integration, unparalleled staging and a real sense of Being There.

Like the C4 Platinum, the C2 features adjustable spikes hidden in the base for fine-tuning their position in your room, while concealed speaker-cable connectors in the back keep everything neat. After all, your eyes should be on the speakers – not the wiring.

Confidence C1 Platinum

Don't let their size fool you. After all, you know what they say about good things and small packages. The remarkable Confidence C1 Platinum speakers take everything that's amazing about the C4 and C2 and put it into a pair of immaculate, compact standmounters.

They use the same precision-coated Esotar^2 soft-dome tweeter, the same MSP mid/bass woofer, seen here in a 17cm version, and the same Kapton voice-coil former, advanced first-order crossover, machined aluminium baffle and glass-blasted tweeter plate. And they deliver the same smooth tonal balance, resolution of detail and the feeling of being in the room with the musicians as their larger siblings.

Confidence Center Platinum

Watching films is all about being immersed – and that's what the Confidence Center Platinum brings to your system. The double Esotar^2 tweeter and 17cm mid/bass driver arrangement is optimised for integration into a multichannel Confidence Platinum (or Evidence Platinum; see p54) system.

The speaker has an adjustable plinth for precise positioning, and dispersion can be adjusted for placement above or below a display via a rear switch.

Evidence Platinum

No compromises.

Years of research have gone into making Evidence Platinum our finest speaker. No expense has been spared in its development; no obscure avenue of acoustic research left unexplored. And not a single corner cut.

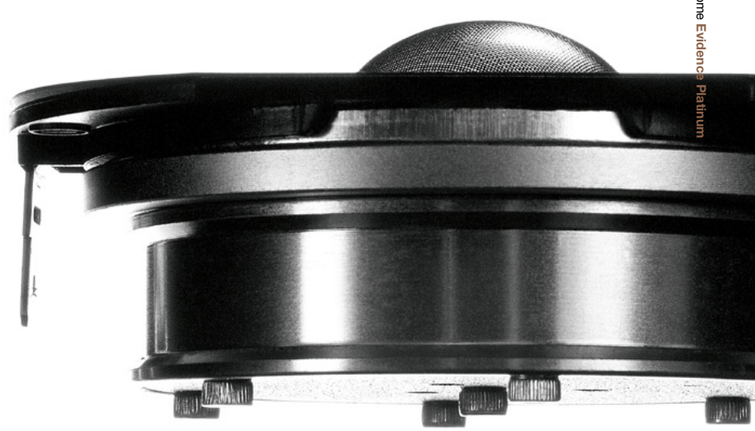
From its sophisticated design, materials and construction to the advanced acoustic expertise that underpins its sound, every single detail in the Evidence Platinum is designed to deliver an unparalleled musical experience.

You don’t listen to music with these speakers. You *hear* it.

Dynaudio Home Evidence Platinum

Each Evidence Platinum speaker is handcrafted to near-impossible standards

Sound foundations
Dynaudio Directivity Control dramatically reduces the effect your room has on the speakers by up to 75% – and every part of the speaker is optimised for that philosophy



Before we start, we just want to say this: Evidence isn't a 'luxury' speaker. It doesn't have gold-plated screws or endangered wood inlays, and it doesn't make boastful (and meaningless) claims about the ethereal nature of sound.

It's simply the best way to hear your music.

Evidence Platinum encompasses all the values and ambitions we had when we started Dynaudio in 1977 – to reproduce music without colouration, effects or distortion, so you can hear it unvarnished: the way it was meant to be heard.

Each speaker is handcrafted to near-impossible standards in our factory in Denmark – overseen by experts in furniture polishing, acoustics, materials science (the people who handle the proprietary Magnesium Silicate Polymer material we use for our drivers and the precision-coating we put on our soft-dome tweeters), woodworking, CNC machining and more. And it doesn't leave us until it's perfect.

Dynaudio Directivity Control

Underpinning the sound is advanced Dynaudio Directivity Control (DDC) – which dramatically reduces the effect your room has on the speakers by up to 75%. It works using precisely positioned dual woofers, midrange drive units – and, of course, our legendary Esotar^2 tweeters – all precision-matched in their arrays, and mirrored up the length of the hyper-stable 4cm-thick machined aluminium baffle.

Behind the drivers is an advanced crossover design, uprated wiring and components and ultra-sophisticated bracing. Even the screws we use are optimised for the concept.

The crossover is housed in its own compartment to isolate it from any unwanted vibrations and provide an optimised thermal and mechanical environment for its high-grade components. It's also ventilated at the back to keep its operating temperature within the super-strict tolerances our engineers have laid out (they like setting themselves challenges like that… and then beating them).

Why use four woofers, housed in two separate cabinets? Because they deliver a more even spread of lower frequencies in the room – something you wouldn't realise with a single, large subwoofer. Not only that, you still get the power of a larger driver, but with it comes the control and precision you can only achieve with smaller drivers.

The Esotar^2 tweeter

We've been perfecting our soft-dome tweeters for the best part of 40 years – so, as you might imagine, we've become pretty good at it.

The Esotar^2 is the culmination of all that research. Its precision coating means its frequency response can easily top 25,000Hz without distorting, without delivering unwanted resonances, and without letting its transient response waver or compress.

And because there's a lot of airflow in a tweeter (even if it is a really small piece of equipment), we've applied aerodynamic principles to its design, too. Its magnet assembly is shaped and damped to absorb as much rear energy as possible – which translates to incredible dynamics and purity.

Evidence Platinum: pure craftsmanship; pure music.

Sub

Dynaudio subwoofers are about much more than shaking the pictures off your walls and rattling the fillings out of your neighbours' teeth (although they can probably give it a good try if you want).

They're all about giving your films and music that extra push; the extra punch that really makes the hairs on the back of your neck stand up.

Listen to an orchestra at full throttle and it's *really* loud. It's pure, and musical, and dynamic, and lifting. And there's also a lot of bass. The same goes for live gigs. Or a high-budget film in a good cinema.

If you want to give your films and music that little bit extra, a Dynaudio subwoofer is the way.

The Dynaudio Sub 600's high-performance 300W amplifier powers the 30cm driver in a sealed cabinet. It's designed to deliver serious weight, authority, punch and power for those critical thunderous movie moments, but remain supple, precise and musical enough to bring something extra to stereo music on your hi-fi.

It can connect to any AV receiver or stereo preamp, and you can fine-tune the satellite speakers' crossover point (flat, 60Hz or 80Hz) via a selectable high-pass filter to ensure seamless integration with the rest of your system, whatever size or configuration you're using.

And because the sub takes the real heavy lifting away from the other speakers in your set-up, they can do their job under less low-frequency strain – meaning even better midrange performance and improved soundstaging.

You can even link more than one sub together in a master/slave configuration. Why? To better avoid room nodes and deliver a much less directional performance in the bass, while providing even more headroom for when things get hectic on-screen or in your music.

If you want to give your films and music that little bit extra, a Dynaudio subwoofer is the way

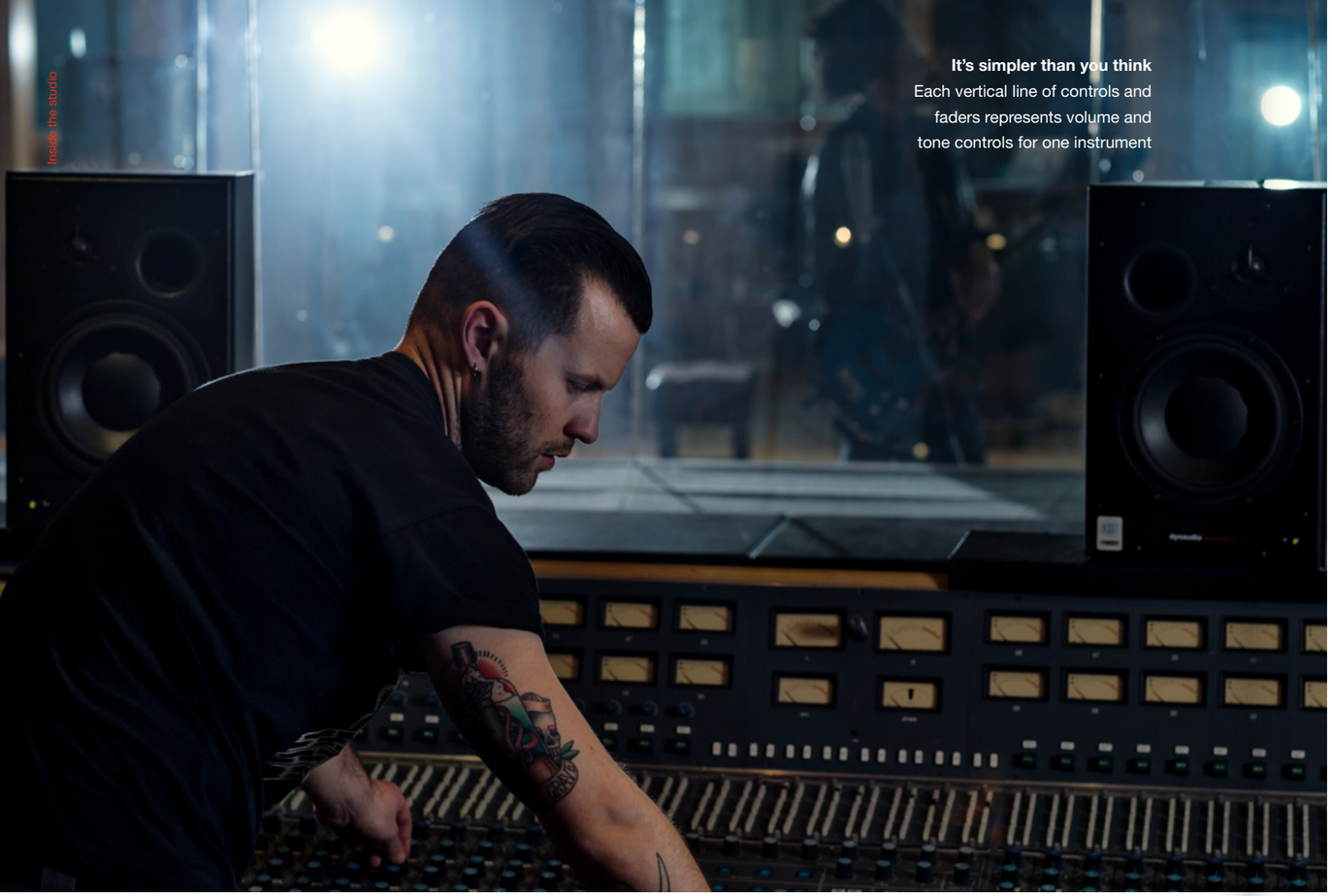
Bass that works for you
You can connect the Sub to any stereo preamp or AV receiver, and fine-tune the crossover point for maximum performance

Inside the studio

Inside the studio

We went to London’s AIR Studios – home of records from the likes of Adele, The xx and John Williams – to see how they record some of the world’s most famous artists

The cathedral of sound
AIR Studios in London is housed inside a converted church… which presented a few acoustic challenges



It's simpler than you think
Each vertical line of controls and faders represents volume and tone controls for one instrument

Recording studios, for people who've never been in one, are mysterious places. There's the massive mixing desk, for a start. So. Many. Buttons. What do they all do? Then there's the weird sound-proofing on the walls; the huge window between the control-room and the studio; the sense of Things being created – possibly future classics.

The world-famous AIR Studios in London has produced no end of classics. Its roster of artists is as long as it is illustrious: Adele, Van Morrison, John Williams, Coldplay, Joni Mitchell, Muse, Paul McCartney and Red Hot Chilli Peppers are just a few of the stellar acts who've graced its halls. Then there's the film side: the colossal Lyndhurst Hall can easily house a full symphony orchestra… with a choir (and does, often). Scores for blockbusters including *Harry Potter & The Philosopher's Stone*, *The Last King of Scotland* and *The Dark Knight* have all been recorded here. (Also, *Borat*.)

And yet anyone, provided they've the funds, can hire it and record there. You can use the same rooms, the same equipment and the same engineers.

So, what *does* go on in a professional studio? How do you get from "I've got a few songs written and I'd like to record them" to "Here's your finished album, guys"?

We met up with Tim Vine-Lott, AIR Studios' technical director, in Studio 3 (his natural habitat) to find out. "It depends on your ability, how well you've rehearsed, the size of your wallet – and, frankly, how easy it is to be intimidated when the red light goes on. The first Cars album was recorded and mixed at the old Oxford Street studio in seven days flat," he says. "They knew exactly what they were going to do: get into the room, bit of a tweak, make it sound right and let's go. Bang, bang, bang."

Rehearsing is crucial

Other artists might need time to bed in and find what works. You might all want to play in the same room, together, looking each other in the eye; you might rather do it all separately in booths. Either is fine. You want the band to be comfortable, Tim says, because that's when the best music starts to happen. "They're just coming here to do what they do, and all we're doing is helping them get it down," he adds.

"If they've got doubts, they won't perform well. Any artistic conflicts or anything that might make them more creative, that's nothing to do with us!"

Most of the work is done before the 'Record' button is even looked at. The guitarist, bassist and vocalist get acquainted with where they are and what they're doing. They're able to hear themselves comfortably, they can hear everything else going on around them comfortably, and they're confident.

"That's when they'll perform their best. If they've got any doubts, they won't. Any artistic conflicts or anything that might make them more creative, that's an environment in the room – nothing to do with us!"

Comfort = performance

Spinal Tap-style shouting-matches aside, that means they might use their own personal vocal microphones, their own cables, insist on setting up the vocal booths a certain way, have no brown M&Ms in the chill-out area… For example, one regular – and stratospherically famous – artist likes Studio 2. "He likes his own Audio-Technica AT194 and M150X microphones. As long as he's in that room, and he's got his engineer in the room with him, he's happy."

It all has to work. The last thing you want to worry about as an artist is for you, your producer and your engineer to be ›

Recording is about hearing what's going on on the floor with your artist. Mixing is bringing each strand of music together. Mastering is producing it for different formats

worrying about what's happening in the signal chain – you need to know that exactly what you hear is exactly what's being recorded.

"You've got two specific workspaces," says Tim. "Recording and mixing; they're different environments. Recording is about hearing what's going on on the floor with your artist – whether it's an orchestra, a band or a soloist. You need to hear what they're doing, and you're optimising your recording for that.

"Then you get mixing. What you're doing there is listening to each strand, each track, each thread. You're bringing things together… and not necessarily the way the artist wants."

Recording vs mixing

Surely the artist knows best, though? Surely they know their music better than anyone? "The artist has an amount of input," says Tim. "Mixing is a different discipline to recording. The artist knows how they want to play the parts, but when you're mixing you need to hear everything that's going on and make sure you're recording it as effectively as possible."

It's crucial, then, to trust the people on the other side of the glass: the engineer and the producer. The engineer sits in front of the mixing desk and tweaks the controls. He's the one taking your unvarnished music and committing it to tape (or, these days, hard-drive). The producer leads the creative process. He'll be the one offering pointers on how to approach a take – whether to do it again if he thinks you can do better, or telling you to stop and move on if he thinks you're burning out.

You might imagine it's glamorous – a world-famous studio, Grammy-winners wandering around, the sense of history surrounding the place. And, honestly, it is. But it isn't as polished as you might think.

"John Williams," says Tim. "When the Hall was designed, they couldn't guarantee the acoustics – but they could guarantee to get 400 people in there, which is what the owners wanted. So, acoustically, it was a bit awkward unless the whole place was filled with people, who are good at damping reflections; one of our major issues is reflections from the ceiling." ›

Light on, hands off
Once the band starts, the controls don't get touched – it's all about the music

There must've been some ultra-high-tech acoustic-treatment solution, then? "Nope. They started off with a dishcloth and carpet offcuts on the floor between John and the microphone to kill off the first reflection; he didn't want what came off the floor – only the room itself. He just played around with that for the best part of half a day. Then he bashed through it all."

You heard it here: bits of carpet and gaffer tape in the studio – a studio recording an orchestra, at that – can make the difference between something that sounds incredible and something that sounds muddled and sub-par. "It's not really technical," Tim says. "The equipment is quite technical, but all we need to do with that is make sure it works within – or better than – spec."

In the engine-room

Yes. The equipment. Once, it was all tape-based – reel-to-reel tape, up to 5cm wide for 24 tracks. The machines were mechanical and, while they were relatively simple, it was a bit of a battle to keep on top of their foibles. They were the recording-studio equivalent of one of those vintage cars that bristled with levers to make it go. And it was expensive: "You can buy yourself a huge hard-drive for next to nothing these days. A roll of 24-track tape will give you just over 15 minutes of recording… and it costs nearly £200," says Tim.

Let's say you record your whole album in one take – that's still verging on £1000 for the tape alone. And it doesn't even include the machine itself. "You need someone who knows how to drive it and maintain it, too," he adds. "Suddenly it's not so attractive."

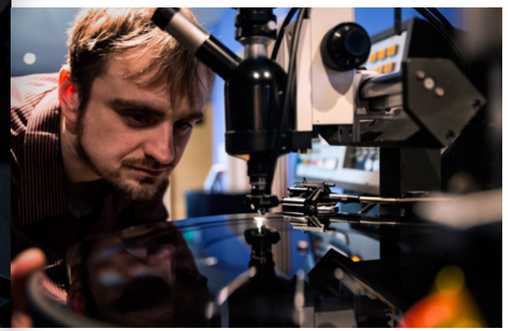
However, he does point out that artists often record digitally and then record that pristine take onto tape to get a more analogue sound.

It makes sense; the input (the instruments and vocals) is mostly analogue, and the output (the amplifier and speakers, or, in the case of Dynaudio Focus XD speakers, the speaker driver itself) is analogue. The bit in between is whatever the music is stored and played on. Making sure the in-between bit is as transparent as possible is what the engineers focus on.

But Tim thinks that quest for transparency can be taken too far: "There's a camp of audiophiles who are all about the gear, and not about sound, and I find that really disappointing."

Endlessly tweaking the system without actually *listening* to the music it's putting out can overtake some people, he says. "I've spent the thick end of 30 years providing engineers, producers and artists with facilities to record things as cleanly or as dirtily as they want – and the ability to be able to hear accurately what it is they're doing.

Wondering where the bass is on a recording? Don't: it's meant to sound like that!



"You've got the best turntable, with the best arm, and the best cartridge, and so on – but when you drop the needle in the groove, if you aren't happy with what comes out, there's either something wrong with the way you've put your system together, or you're not happy with the material."

Second-guessing the experts?

He points out that the material has been meticulously prepared by the artist, engineer and producer; what's delivered to you will be the way the artist wants you to hear it.

"Some people will be playing stuff back, and you know they're thinking, 'Where's the bass?'. I guarantee you, that's what it's supposed to sound like. I was there when it was recorded; I came in and tweaked the cutting amps on the lathe that actually cut that bit of vinyl. That's what it's supposed to sound like.

"You might say, 'There's more bottom on my system'. Well, your system is wrong."

So, what's the right system? Tim points to the colossal Dynaudio M4 studio monitors. "They sound weird to people who aren't used to them," he says. "They sound totally flat. No character. You don't want colour in your studio monitoring, because that's going to affect the way you mix and produce everything."

If Tim's so used to uncoloured sound in the studio, then, what does he listen to music on at home? "I've got a pair of Dynaudio Xeo 5s in my living room, and they're very similar to the BM15 desktop monitors. That's what I like about them. But these studio monitors are 4.5kW per side. You'd never want to use it all because it'd make your ears bleed."

Why studio monitors sound 'weird'

All that power might seem excessive – especially when the engineer isn't sitting very far away from them – but that headroom is what gives studio monitors their edge. The point is for nothing to distort. You're not distorting amplifiers, you're not distorting drivers into the non-linear phase of any of their movement, and you're keeping it as clean as possible.

"We've changed some drivers here, I know. They pop every now and then – but they're replaced with exactly the same ›

Clean and clear
It's crucial to minimise distortion or colour in the sound – and good studio monitors do just that

driver. And we can prove it: we'll take a frequency response and an impulse response, change all the drivers round, and the responses are exactly the same. That's how crucial it is to have the right speakers. You know precisely how they'll respond."

The mastering stage

The final stage of the process, after recording and mixing, is mastering. "That's a different environment again because you're optimising the 'product'." Tim winces. "I hate that word. You're optimising it for whatever medium you're going to release it on.

"When you buy an album these days you get an LP with a ticket for one free download or several free downloads of whatever it is you've just bought. Each of those needs to be mastered differently because of the material, the medium, and also the way it's going to be listened to. You can guarantee that anyone who's going to actually bother to put a record on is going to have a turntable, a pre-amp and some speakers – and they're going to listen to it in a different way to CDs. MP3s get consumed, mainly, through earbuds."

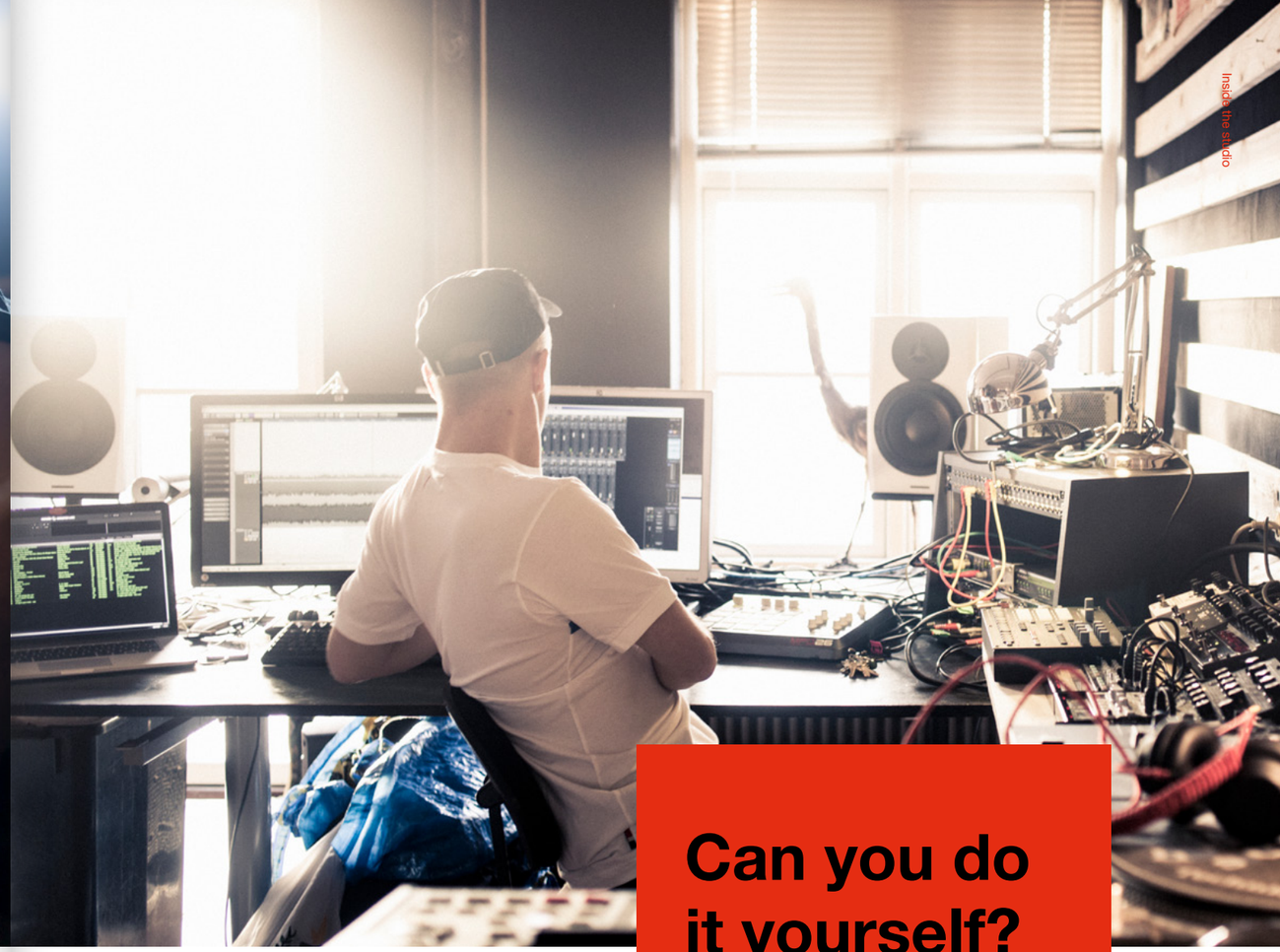
It's about making sure the music is delivered it to the listening public as the artist actually wants it to be perceived – regardless of the format it's on, be it analogue vinyl, 24-bit/192kHz hi-res, MP3 or anything else.

For Tim, the recording doesn't need any fancy certifications of special formats. All it needs is 'Recorded, mixed and mastered by so-and-so at AIR Studios, London'. "That's the kite-mark," he says. "Delivered to you in the highest fidelity by whoever's got their name on the recording."

Consistent from studio to living room

It's telling that Tim uses Dynaudio speakers at home as well as in the studio – but perhaps not surprising.

The company's designers and engineers have worked hard to ensure that the sound from studio to living room is as consistent as possible – so what the professionals hear in the studio is as close as it can be to what you'll end up experiencing at home on the final master.



And if you're hearing what they heard, you can be confident that you're hearing it correctly. "If someone tells you you haven't got the ears for it, you believe it," says Tim. "I think if we do any one thing to improve people's perception of music, it's to increase funding for music lessons. Go and see a live band; go and see an orchestra or a quartet or a trio or something. Anything. Just go and see and hear live music in an environment that's unamplified so you can actually hear what the instruments sound like."

And that's the key. It's listening to music for the sake of listening to music. You don't have to be a slave to equipment, endlessly tweaking and agonising over your next piece of gear. Just sit back, safe in the knowledge that people like Tim, his fellow engineers and producers, and the artists themselves, have put in the hard work – so you don't have to.■

Can you do it yourself?

Obviously, smaller studios don't have the budget or space for the monolithic monitor systems, machine-rooms, acoustic treatments or outboard equipment of the big boys, but Dynaudio has taken everything it's learned from operating in those rarefied environments and applied it to the kind of speakers you could use at home.

LYD is all about creating a monitor everyone can understand without reading the manual. It's designed to sound consistent at all volume levels, too – so if you're mixing or mastering at home, or in less-than-ideal acoustic conditions, you won't get irate neighbours hammering on your door (unless the music's terrible – but that's all on you).

For more information on the LYD range, turn to p70.

LYD

What if you could use the same technology in your own studio as the major players use in theirs?

You can. LYD uses all the knowhow we've gained through supplying some of the world's biggest recording studios with full-on reference monitor systems – and fits it into a pair of compact nearfield speakers.

And it isn't a poor cousin of our big systems, either. It's a complete redefinition of our own products – we went back to the drawing board to find out exactly how much further we could take those concepts.

As it turns out, the answer was 'quite a lot'.

Active nearfield studio monitors need to present the unvarnished truth: no colouration, no distortion, no flattery of the music running through them. You need to be able to hear exactly what each thread of the music is doing – so, when it comes to mixing and mastering, you know you can deliver exactly what the artist wants.

LYD combines decades of experience in producing no-compromise reference systems for major studios all over the world, with expertise in home and car audio, digital processing technology and materials science. And that combination means you'll hear nothing but the truth.

But we don't believe personal monitors need to look like standard pro boxes. You've taken great pride in building your studio; you want artists to feel invited, inspired, immersed in the music. So we've applied the same creativity to LYD as we do with our home hi-fi speakers – and we're glad the people in the design department insisted on it, because they've created something beautiful.

LYD SERIES

LYD is designed to be a monitor anyone can use without a manual. Just getting started in your engineering or producing career? That's daunting enough as it is without needing to decipher another complicated set of switches and dials on the back of your speakers. Seasoned pro? Then why should you have to learn a new set of controls? You shouldn't.

Just tweak the wall-position or Sound Balance tilt-filter (for a brighter or darker sound) and you're done. Best of all, you don't have to crank them up to hear them at their best – something that's hard to do if you're in a smaller or home studio. LYD is designed to sound the same however loud you turn up the music.

Now it's time to create…

LYD 5 LYD 5, with its low-volume precision, is the ideal complement for any small studio set-up. It uses the same lightweight aluminium voice-coils in its handmade 5in MSP drive-units as our high-end hi-fi speakers, and pairs them with cutting-edge Class-D amplification as well as a 24-bit/96kHz signal path with advanced DSP.

LYD 7 This monitor uses sophisticated DSP to extend or its curtail low-frequency response by 10Hz, while Position and Sound Balance controls let you fine-tune for total neutrality in your environment. Its larger 7in woofer helps extend bass, while the low-mass aluminium voice-coil, vented ferrite magnet and MSP driver take care of precision.

LYD 8 With its 8in MSP woofer and state-of-the-art DSP, LYD 8 provides the kind of performance, precision and bass heft that dreams (and maybe hit albums) are made of. Like the rest of the range, these nearfield monitors let you tune their sound for their position in the room, feature handmade drivers, and contain advanced Class-D amps.

LYD 48 This 3-way near- to midfield monitor reaches eyebrow-raising levels of accuracy thanks to a new soft-dome tweeter and Dynaudio's proprietary MSP midrange driver and woofer. Each driver is fuelled by a powerful, state-of-the-art Class-D amplifier and a full 24-bit/96kHz signal path. And, like the rest of the LYD range, it lets you fine-tune low frequency response, position and sound-balance using cutting-edge DSP.

M5P Evidence

Mastering: mastered.

Our M-range of speakers has been a fixture in professional recording studios all over the world for years. It's used for main monitoring and loved for its neutral, no-compromise sound.

The M5P sets out to do the same for the mastering world. It's custom-built in our factory in Denmark, and it's the first studio monitor to feature Dynaudio Directivity Control. That makes it easier to integrate into any room – so you can spend less time tweaking your set-up and more time making your music sound the just way you want it.

Knowing which things to adjust and which to simply leave alone is paramount in the mastering stage of any recording. And you can't do that if you can't hear every part in crystal clarity.

The Evidence M5P farfield monitors deploy some unique technologies to ensure that you hear nothing except exactly what the artists were performing – in every track.

Built to order

Each pair of M5P Evidence speakers is handmade in our factory in Skanderborg

The key is Dynaudio Directivity Control: a vertical, symmetrical drive-unit array backed by sophisticated crossover technology and advanced cabinet design. Every part of the system is specifically engineered for maximum sound quality… right down to the way the baffle is shaped, and even the screws that hold it all together.

It uses two tweeters, two midrange drivers and four woofers per speaker. Each driver is phase- and frequency-matched to its counterpart to produce incredibly accurate sound-radiation characteristics. That means up to 75% less energy radiated to your floor and ceiling – so the M5Ps are far less reliant on your room's own characteristics, or their position, than other studio monitors.

The woofers are placed above and below the tweeters and midrange drivers. This serves up a more even spread of low frequencies into the room, but it also combines the diaphragm surface-area of a large single-woofer design with the precision and speed of smaller single voice-coil-magnet units. In practice, that means a controlled, even, accurate (and hair-raisingly revealing) sound.

Of course, since we've been making loudspeakers of every type for the past 40 years, we've learned a thing or two about driver development. That why the M5P Evidence is fitted with the very best components we have to offer; the culmination of decades of acoustic research.

You get our legendary Esotar^2 soft-dome tweeters, complete with precision coating, for ultra-high-quality high-frequency performance. They're suspended in magnetic ferrofluid to increase power-handling, improve the dome's excursion and absorb unwanted heat and excess energy.

The CNC-machined middle-section has carefully rounded sides to minimise sonic diffraction and maximise uniformity. It's completely isolated from acoustic vibrations, too – making for even more precise reproduction.

The midrange drivers and woofers, meanwhile, are made from our own Magnesium Silicate Polymer (MSP) material, optimised for exactly the right balance of rigidity, stiffness and damping – which you'll hear as exactly the right combination of power, finesse and control.

All the crossover components are isolated in a separate compartment that provides the ideal mechanical and thermal environment for them to operate at their best. Passive ventilation makes sure they don't overheat, even when you're driving the speakers hard (and believe us, you can), while glass-fibre-reinforced circuitboards, select oxygen-free copper wiring and precision construction all go to serve up the sound quality your ears – and your audience – demand.

Dynaudio Car Audio

Car audio

It’s sound that drives you.

Chances are you spend a lot of time sitting in your car, and chances are you listen to music while you do it. We don’t believe you should have to compromise on sound quality – especially when you might spend more time listening to music on the road than you do at home.

We’ve built a dedicated automotive research-and-development centre to explore new technologies (and adapt our tried-and-tested ones) specifically for use in cars. Our long-standing relationship with Volkswagen means you can experience top-quality Dynaudio sound wherever you go.

More than just a stereo
We position speakers all around the car – and control them all with sophisticated DSP – which means fantastic sound wherever you sit

It's easy to make car audio sound simply decent. It's a different story if you want to make it sound outstanding.

That's why we have our own R&D team dedicated to making 'outstanding' the norm when it comes to our in-car systems. It couldn't be anything less: our partner is Volkswagen and, like us, they'll never just settle for 'simply decent'.

We want you to feel more relaxed when you get out of your car than you were when you got in.

We've combined the knowledge we've gained from designing and producing nearfield reference systems for recording studios (where the engineer sits really close to the speakers), with our expertise in building award-winning home hi-fi speakers. Why those two areas? Because you sit close to your speakers in the car… and you want the same music experience you get in your living room.

Variables are predictable

A car's interior is a variable but controlled space. One day it might be just you, wearing a T-shirt and jeans. The next, there could be four or five people – all in coats and scarves (Danish weather isn't exactly predictable). More people (and more clothes) means the character of the sound will change.

You might think that would present a nightmare for our engineers – but it actually helps. That's because they know there's only a certain amount of variables to take into account. The size of the space never changes; the hard surfaces are always hard, and the soft ones always soft; the position of the speakers never changes; the sources are always the same. They know the kinds of temperature variations they'll be dealing with, the level of noise outside the car as it moves, the type of vibrations it'll be subjected to, even which parts are likely to get wet if you open the doors when it's raining.

And if they can take into account the variable human aspect, and make every situation sound equally precise, controlled – and entertaining – they've done the difficult bit.

So, we developed a new range of speaker drivers especially for the automotive market. They're still made from our proprietary MSP (Magnesium Silicate Polymer) material, but they're optimised for in-car use rather than for the home or studio. They, the baskets they sit in and the electronics

Measurement and analysis
We precisely model every surface in the car, then feed that data into our DSP algorithms. It means the sound optimises on-the-fly to the conditions inside the car

that power them are all specifically engineered for use in cramped, hostile environments such as car doors, pillars, rear compartments, wheel arches and the like.

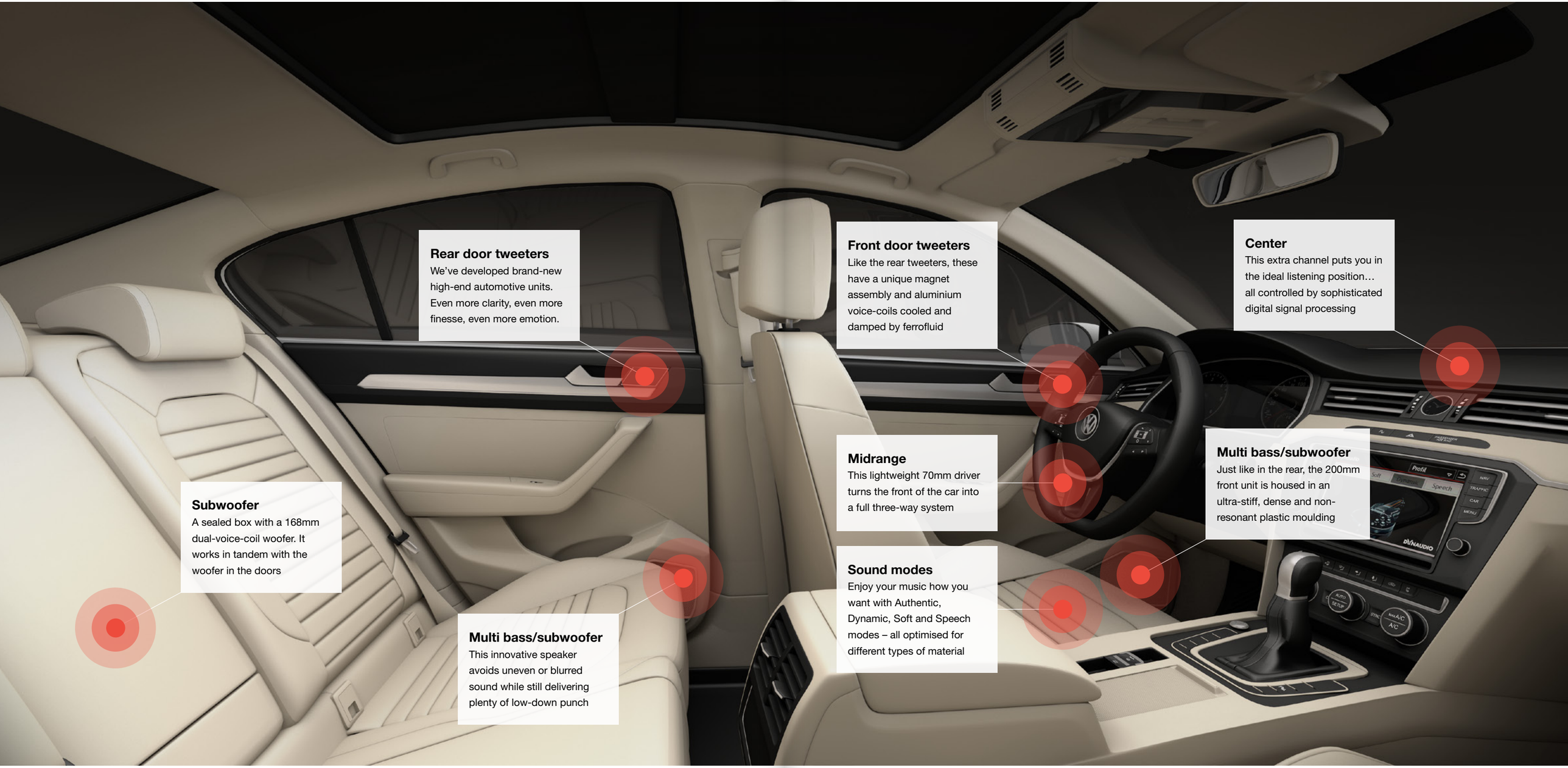
Our engineers have become really rather good at it, too. We've developed sophisticated DSP (digital signal-processing) technology to help: it has settings for you to tune your system to your preference: Authentic (for the unaltered experience); Dynamic (for recreating the power and punch of driving rock or pop); Soft (for low-resolution broadcasts or recordings); and Speech (designed for voices – whether that's the news, audiobooks or hands-free phone calls).

And, crucially, it takes into account the fact that you aren't sitting in an ideal position, like you might be at home. We map how every curve and surface inside the car reflects sound, and then delay the signal to each speaker to match the distance to their position. That means you'll hear them as you would if you were in the ideal central position at home.

Every millimetre – every fraction of a millimetre – of our in-car systems is meticulously built, optimised and researched to produce the very best. It's sound that drives you.

Made in Denmark
Like the rest of our drivers, our automotive speakers are all built in our factory in Skanderborg

Explore the VW Passat



Finishes

What do you do when you find high-end furniture-polishing too easy? You come to Skanderborg and see what you're *really* made of.

Every speaker that comes out of our factory is painstakingly finished, polished and inspected by experts. Every screw is tightened; every connection checked. Just as it should be.

Some of our range receives up to 13 coats of lacquer – all finished within a 50-hour window (and we really mean 50; 51 hours is too long. If we go over time, we have to start all over again). We only use materials from sustainable sources. And we never let anything leave us unless it's perfect.

After all, hi-fi speakers should be just as great to look at as they are to listen to.

	Emit	Excite	Xeo	Focus XD	Contour	Confidence Platinum	Consequence Ultimate Edition	Evidence Platinum	Sub 250 II	Sub 600
Black Ash Satin										●
Black Piano Lacquer				●	●	●		●		●
Black Satin	●	●	●						●	
Bordeaux High Gloss						●		●		
Grey Oak High Gloss				●	●					
Mocca High Gloss						●		●		
Rosewood Dark High Gloss					●					
Rosewood Dark Satin		●							●	
Rosewood High Gloss				●		●				
Rosewood Satin							●	●		●
Walnut High Gloss				●						
Walnut Light Satin					●					
Walnut Satin		●							●	●
Wengé Satin							●			
White Oak Satin					●					
White Piano Lacquer					●					●
White Satin	●	●	●	●					●	

Meet the family

Emit

Emit M10
Emit M20
Emit M30
Emit M15C

Excite

Excite X14
Excite X14A
Excite X18
Excite X34
Excite X38
Excite X44
Excite X24 C
Excite X28 C

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Xeo

Xeo 2
Xeo 4
Xeo 6

Contour

Contour 20
Contour 30
Contour 60
Contour 25C

Focus XD

Focus 20 XD
Focus 30 XD
Focus 60 XD

Confidence Platnium

Confidence C1 Platinum
Confidence C2 Platinum
Confidence C4 Platinum
Confidence Center Platinum

Consequence Ultimate Edition

Consequence UE

Find your nearest Dynaudio dealer at dynaudio.com

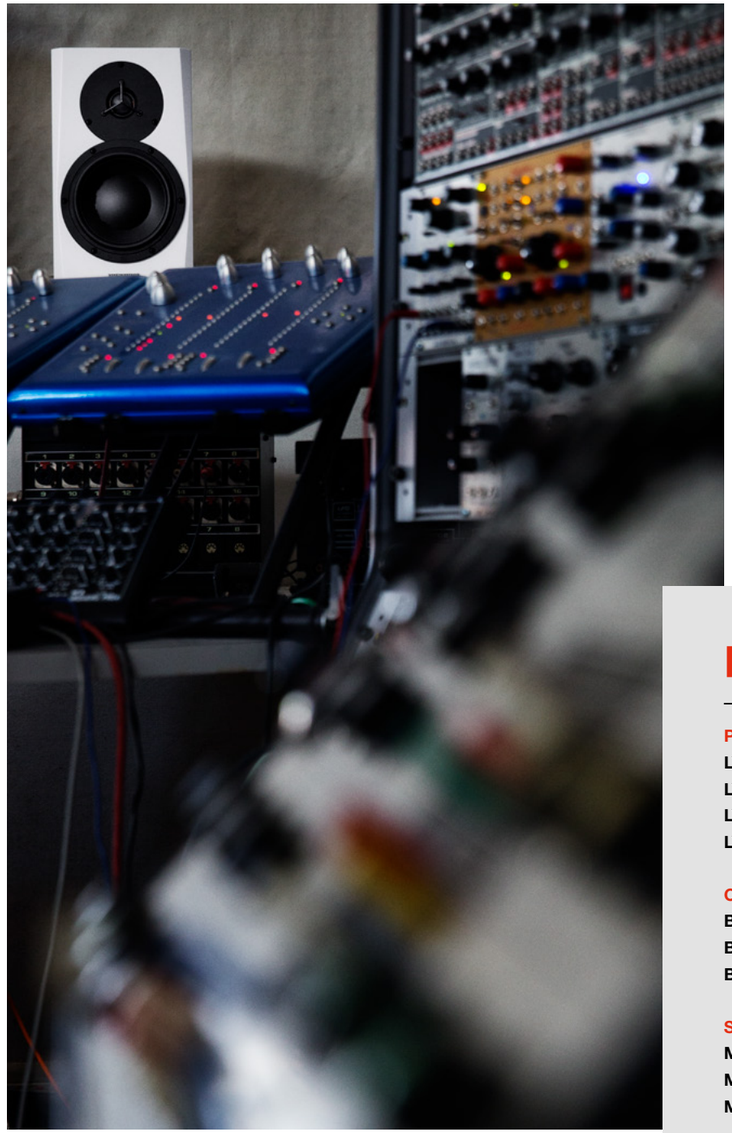
Evidence

Evidence Master
Evidence Platinum
Evidence Temptation
Evidence Center

Sub

SUB 250 II
SUB 600

There's much more information about our PRO series at www.dynaudio.com



PRO

Personal reference monitors
LYD 5
LYD 7
LYD 8
LYD 48

Classic monitors
BM6A
BM15A
BM5 mkIII

Studio main systems
M3VE
M3XE
M5P

Subwoofers
BM9S II
BM14S II

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Next issue

Journey to Jupiter

We take you behind the scenes in our brand-new R&D centre - and on a voyage to Jupiter: a 2197-cubic-metre lair that's home to our huge, truth-telling robot...

Learn more, get the latest tips and tricks, and read our reviews on
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