The history of

Cornered Audio



Established in 2010, Cornered Audio ApS creates high performance loudspeakers for modern homes, commercial installations and entertainment venues.

The history

Founder Hans V. Madsen has more than 30 years of experience from the audio industry in both the consumer and professional segments.

"No matter where I went on the planet, customers asked for discreet loudspeakers. Tables, chairs, sofas, shelfs. Everything can be visible, but for some mysterious reason, speakers must be hidden away. One very late evening, listening to music and being in an almost meditative state, the Cornered design appeared for my inner eye. The next day I decided to stop working against the trend towards discrete speakers, but to work with it. I then formulated the Cornered Vision: 'To create a discreet loudspeaker system that would integrate well into homes and commercial installations while delivering unexcelled performance'," says Hans V. Madsen.

Vision

"The idea behind Cornered is simple and powerful; we design our speakers to be placed in corners or on walls and ceilings without steeling the picture. And we use the corner to increase output and create uniform coverage throughout the room. We brand ourselves by the term 'Aesthetic Sound' as our products are pleasing to the eyes as well as the ears," says Hans V. Madsen.

Design

The patented design is classic Danish and minimalistic, blending form and function. With a 90 degree triangular shape, the cabinets fit perfectly in corners - either vertically on the wall or horizontally below the ceiling. The front is slightly curved and the cloth covered grill mounts with neo magnets so it can easily be removed and allow access to cable terminal and mounting points. Mounting points are an integrated part of the design and allows the speakers to mount flush on wall and ceilings without brackets. The cable terminal is hidden behind the grill and cable is run from the rear of the cabinet through a port to the front baffle, so there is no visible cable no matter if the speaker is installed vertically or horizontally.

Two cabinets can be mounted together, working as a bi- or dipole speaker in home cinema applications. And in professional applications, two cabinets can be coupled



Facts

CORNERECAUDIO

Company name Cornered Audio ApS

Head office Albertslund, Denmark

Established in year 2010

Established by Hans V. Madsen Main audio product types Loudspeaker systems

Main markets Scandinavia, UK, France, Italy, China, Korea Australia, South Africa

Number of employees 4



together to widen coverage to 180 degree. Three cabinets can be coupled together to cover a 270 degree corner and four boxes can be coupled together and flown from the ceiling offering 360 degree dispersion.

With the discreet design, music and movie lovers are enabled to install a powerful multi-channel speaker system in their home without making the living room look like a sound studio. And professional installers can install serious sound systems in meeting rooms, shops, and lounges without getting in bad standing with architects and interior designers.

Iconic products

The iconic C5 model hit the market by summer 2010. It received excellent reviews. German AREA DVD called it 'outstanding', Hi-Fi Test gave it strong recommendation in the category 'oberklasse' and in Hungary, AV Online stated "...they acted almost like studio monitors".

In 2011 the C5 was installed in Danish rebel movie producer Zentropa's VIP Screening room in Berlin. And later same year, Zentropa's founder Peter Aalbæk installed a 5.1 C5 system in his home with the new C12PNC subwoofer from Cornered – a subwoofer designed as a puff appearing as a leather seat. In 2012, Cornered was established in 10 countries and exports exceeded 90 % of the turnover already in year one. Over the next years, the smaller C3 and C4 was introduced and Zentropa now also installed C4 in their VIP screening rooms in the Danish operation 'filmbyen'.



C4 back to back without grills at "Boards and Sports" in Istanbul, Turkey.

Later in 2012, the larger C6 and C6TRM models were introduced and shortly after, the largest Turkish television company Digiturk installed C6TRM and C12PNC's in all their VIP movie screening rooms. Today Cornered's speakers are sold in more than 40 countries. The customer list includes prestigious customers such as Louis Vuitton with five shop installations in France, the iconic five star Hotel D'Angleterre in Copenhagen, the five star Hotel W in Bangkok, Sunglass Hut in Mexico with 50 shop installed to mention just a few customers.

In 2013, Cornered Audio took out a design patent on a triangular speaker cable, designed as a support product for the triangular speakers. The cable is of course designed to run in the corner and is a great solution for places where it is not possible to run the cable in or behind the wall – or as a retro fit cable solution in existing installations where the cable is run on the wall.

In 2014 full polar plots were measured for all products and EASE data was made available for professional installers, enabling them to simulate sound pressure and coverage in any given room.

In 2015 the LS1 – an 'Aesthetic Line Source model' was launched at the ISE Show in Amsterdam. LS1 features closely spaced dual horn tweeters and is flown in a straight line with a maximum of six speakers. Such a configuration delivers 104 dB in 30 meters with hi-fi like clarity and very uniform coverage. There is no visible flying gear from the front and the solution is an aesthetic approach to professional sound reinforcement in high reverb venues.

Cutting-edge technology

Technically Cornered Audio takes pride in making a true audiophile product with excellent clarity, dynamics, and sound pressure. Designs feature the use of loudspeaker components from leading European brands and R&D is made by a pool of world-class Danish acoustic engineers. Air coils and polypropylene capacitors are used in the crossovers and to ensure ruggedness and exceptional reliability, everything is on the brink of being over-engineered.

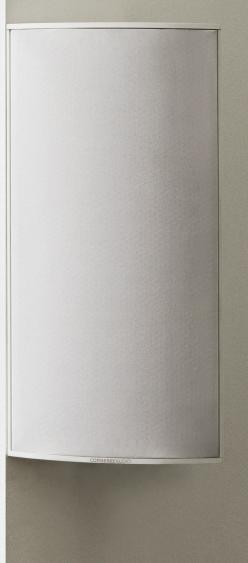
An advanced slave woofer design is developed to adapt the bass response to the boost from the corner, so that the corner is used not to create a bass boost, but to increase the overall sensitivity and output of the speaker. So the speakers sound like 'normal' speakers, but can be neatly hidden away in the corners. All tweeters are designed with waveguides that optimise dispersion at the crossover point and creates seamless integration with the woofers.

Positioning the speakers in corners places high demands on the off-axis response from the speaker. To ensure that the off-axis response is uniform and controlled, full polar plots of all Cornered Audio speakers are measured – a process involving more than 10,000 computerised measurements per speaker. The data enables Cornered to offer EASE data to professional installers so that they can simulate sound pressure, coverage, and speech intelligibility in any given room.





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Room Integration

When controlling the off-axis response and optimizing the speaker acoustically for placement in corners, the speakers becomes surprisingly non-room dependent. The reason is that the first reflection – to which the ear is very sensitive – comes right after the sound leaves the speaker, so there is not enough time for the brain to enable it to perceive the first reflection. The second reflection comes very late as the sound has to travel through the entire room, so there is minimum negative influence from the second reflection.

In addition, as the speaker is angled 45 degrees away from the side walls, there is

a minimum of comb filtering from the walls. The combined result is maximising the amount of direct sound in the listening position and minimising the amount of reflected sound. Because of that, Cornered speakers excel in clarity and are capable of reproducing a natural three-dimensional sound stage, filling the entire room with sound.

A combination of aluminium cabinets and MDF baffles makes the speakers compact while still sounding as a wooden cabinet. The triangular shape minimises standing waves from inside the cabinet, adding to the clarity of the sound. Strong focus is placed on low group delay, uniform phase, and frequency response as well



Cornered speakers are not confined to corners. They also mount flush on walls and ceilings without brackets.

as high minimum impedance to enable the speakers to get the most out of the amplifiers. The sound is forward and Cornered speakers engage the listener with dynamics, emotions, and great speech intelligibility – so you will actually be able to hear the lyrics.

The aluminium cabinet helps to cool the components so the speakers maintain perfect performance for hours even when pushed hard. In the TRM models, power compression is less than 1.5 dB after an 8 hour IEC power test.

Future focus

The current product range offers products for smaller living rooms and shops up to large living rooms and medium SPL clubs and lounges. Cornered will widen the product range to include triangular installable subwoofers, wireless installable stand-alone models, and weatherproof models for outdoor use.

The brand name Cornered describes the core of the company: Designing speakers for corners. However, the speakers also mounts on walls or ceilings – so they are not confined to corners - and in the very near future, Cornered will evolve into the pro segment of the market with an aesthetic solution to large scale PA systems including in- and outdoor line array speakers and club solutions.

Cornered Audio gives customers yet another option to install speakers discreetly and aim at impressing customers and fellow music lovers with aesthetic sound.

Timeline



2010

Cornered Audio ApS is established and launches the iconic C5 model receiving excellent reviews from European AV magazines. 2011 The C12PNC subwoofer is launched – designed as a puff because there is never room for a subwoofer but always room for a seat.

2012

The smaller C3 and C4 models were launched and late in the 2012, the larger C6 and C6TRM models were introduced as well.

2012

Cornered C6TRM and C12 subs are installed in Digiturk's VIP screaning rooms.





2013

First Louis Vuitton installation in Courchevel 1850 in the French Alps, followed by installations at LV Soings, Deauville and others.

2014

EASE Data provided for all models allowing professional installers to simulate sound pressure, coverage and speech intelligibility in any given room. 2014 Iconic 5 star hotel Hotel D'Angleterre choses C6TRM and C12 in their Champaign Bar Balthazar. 2015

Launch of the LS1 Line Source model launched at the ICE Show in Amsterdam.