where music meets design

BY MIKE OHI MAN



ver the past few years audio-video technology has experienced an explosion in design specific products such that today systems can be almost completely hidden and, where they are seen, can actually add to the decor of the room. Recently speakers have undergone a particularly radical transformation; from completely invisible to mimicking the look of rocks and much more.

a brief history of speakers & design

In the old days, good sound required giant boxes that did nothing to help the look of a space. To incorporate these speakers into home design, a classic cheap veneer was often utilized — to be fair, it did kind of go with the faux wood paneling and orange carpeting. With the '80s came the "custom installer". This person pulled wire inside walls and "custom fitted" speakers into living spaces. Speaker boxes got smaller and moved from the floor to the wall. This move to a wall-mounted solution opened up significant living space and increased flow but to the detriment of design, electronics were often the focus of the room.

However in 1982 something remarkable happened in the world of speakers that would change the relationship between sound and space design forever: the first in-wall speaker was built. This was a relatively simple design in which the speaker fit into a wall and used a wide flange to cover any irregularities or spacing between the drywall and speaker. This solution finally ousted speaker boxes from the design space. However, it was quickly discovered that in-wall speakers didn't work in every house. Angular walls meant that sound dispersion was greatly restricted, and walls dominated by windows made an in-wall solution impossible. Therefore the in-wall speaker quickly adapted to the in-ceiling speaker. These adopted a circular shape to match the shape of lighting fixtures and sales vaulted to roughly 70 per cent of the custom installation speaker category. For the past 25

years or so the basic look of these in-wall and in-ceiling speakers has not really changed and it is safe to say that everyone in the design industry is now familiar with the bubble protrusion and flange design inherent in these speakers. Yet, while this now traditional design is functional, the "flanged" speaker solution often detracts from the visual performance of a space and audio is still not integrated seamlessly into organic living environments.

speakers & design today

Today design is playing more of a role in speaker technology than ever before. Solutions are beginning to surface that greatly diminish speaker presence or hide them completely. Three speaker design options that are particularly unique when compared to the traditional in-wall and in-ceiling models are: disguised speakers, flush-mounted speakers, and invisible speakers.

Disguised speakers are a new option in which the speaker is designed with utility in mind to mimic the look of other things in the design scheme. For example, speakers can actually become planters, pictures, or other furnishings and are for all intensive purposes invisible to the casual observer.

However, this type of solution is not suitable for every situation since disguised speakers can be quite placement specific, and the furnishings currently available may not blend with the design scheme. New models are coming out all the time though, and investigating this option for your project could be well worth the effort.

Flush-mounted speakers are more like the traditional in-wall or in-ceiling speaker, but the flange has been removed and the speaker grille actually sits flush with the surface it is mounted into. These speakers leave a very sleek, clean, and modern finish.

Moreover, you can now get flush-mounted speakers in circle, square or rectangle shapes, as well as a variety of sizes, giving more flexibility to match the speaker to other design elements. The grilles themselves can be painted and are offered in either a micro-perforated metal grille or cloth grille allowing even more design options.

Finally, the "invisible speaker" recently redesigned for simpler installation and lower cost, offers the most comprehensive and flexible solution for hidden speaker integration to date. In this design the speaker actually becomes the wall or ceiling. After they are mounted into the ceiling or the wall, the surrounding area is sealed and the surface is finished like the surface they are mounted into. Whether that surface is wallpaper, texture, paint or plaster the sound is actually amazing. Moreover, placement is not as crucial as a conventional speaker would be since the "invisible speakers" have more of a flood-light or non-directional dispersion design as opposed to the conventional spotlight or directional dispersion method. Now both the designer and the electronics engineer have more options when considering locations, and sound can finally be heard without being seen. We would have included a picture but you wouldn't have been able to tell there was a speaker in the space. \square

Mike Ohman is the CEO of Beyond Audio Inc., a custom electronics design and installation company in Kelowna B.C. He brings more than 25 years of audio-video engineering experience along with a Power Engineering degree to his company which is a proud member of the Custom Electronic Design and Installation Association (CEDIA). Contact Mike at mike@beyondaudio.com.