It seems fitting to look at the art of setting up the ultimate home entertainment system, as it consists of so many components and gadgets you can endlessly toy and tinker with. Building an AV system is like constructing a cubby house as a child: It's your hideaway from the world, and a place to escape, relax, and let your imagination take you to faraway lands.

A host of aspects go into creating your ideal home entertainment system. To break the key ingredients down, *The CEO Magazine* spoke with Sasha Apel, Director of Connected Living. Sasha's company specialises in the design and installation of state-of-the-art home automation, systems control, home audio, and video system solutions for homes and commercial projects.

The first step in building your entertainment oasis is deciding on the design and feel of the room. "Typically, an interior designer or architect is the best person to get a feel for the size of the room," Sasha explains. "In a consultation at Connected Living, we start by talking about the client's budget. A lot of it depends on the size of screen, as in the cinema screen or the projector, and what we've got to work with. It often comes down to a bill of materials to work out what we're trying to fit into the space as far as money goes.

"Afterwards, we start looking at acoustics. We consult with the clients and determine what they're trying to achieve, whether it's a gaming or a cinema room, if it's in a basement, or if there's concrete. We need to address that because acoustics is a big part of it. We believe in not spending all of the money just on the equipment; we need to address the acoustics to make sure that everything looks and sounds good.

"Lighting and flooring all come into play: it's all very important in setting the atmosphere for the room before we deal with the equipment. We also have to look at whether it's a themed room. Some of our clients have a theme, whether it's for young kids or gold class, which is what they're trying to achieve with the red carpet and the curtains that pull back to reveal the screen—just really setting the atmosphere of a modern cinema. That's all part of the initial brief that we have when we see a customer, and then we work out who the best designers and architects are that would work well with the brief."

Once you have your domain and design set up, equipment is the next thing you need to decide upon. "The first question we would be asking is whether it's a large TV screen, because they're getting up in excess of 90 to 100 inches now, or whether we're talking about a projector," Sasha notes. "The rest of it flows on from there to things like lighting control, most of which depends on budget.

Image supplied by Bose

THE ULTIMATE
Home Entertainment System

BY JAY GARCIA

THE CEO MAGAZINE TAKES A LOOK AT THE VARIOUS ELEMENTS THAT GO INTO CREATING THE BEST AUDIOVISUAL EXPERIENCE YOUR BUDGET WILL PERMIT.

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"The ability to press 'watch movie' on a universal remote control or an iPad, and then have the lights dim and the projector turn on is what we try to do on every job. Integrating the lighting into the room is very important, whether it's just a stand-alone movie room, or games room, or if it's linked to the whole home. It is very important to be able to control it by pressing the 'watch movie' button and have the lights dim automatically, and maybe some background LED strip lighting if it's a tiered-seating cinema.

"Deciding between a screen and a projector ultimately comes down to budget. As technology is advancing, prices are coming down. The longevity of equipment is always important. It really depends on the brief of the customer, but sometimes a large panel can give you more flexibility. If it's a large

> "Some of the better systems have remote access, so we can power cycle some of that equipment remotely and get full feedback and data on what's happening with power usage." - Sasha Apel

common area, then an LED screen is better than a plasma and maybe even a projector. If it's a dedicated cinema room where light is not an issue and you really want to immerse yourself in the atmosphere of watching a movie, then you can't beat a projector.

"Projectors start at $2,000 to $2,500, but the sky's the limit; you can still be spending in excess of $50,000 on a projector. So that's why the budget actually is important. 3D comes into play as well, if customers are into that. It's not for everybody, but certain content is quite impressive in 3D. The size of the screen also becomes really important; so doing a 120-inch cinema screen, you just wouldn't put a panel in there because it just can't compete with a projector scenario."

With a screen or projector set up, you have something to stare at; now you need noise emitters. "Setting up the audio comes into play with the acoustics," Sasha highlights. "When we're designing the room, we need to decide where the speakers are going to be placed, whether it's 5.1, 6.1, or 7.1. You have to think about joinery units, whether cabinets are involved, if we need to hide the speakers, or whether the customer is happy to see the speakers. In a proper cinema room, we like to build a proper stage set-up so the speakers go behind the screen and you can't see them, similar to what would happen in a gold-class cinema.

"It's important to determine whether or not you're happy to see the speakers, because on the rear-speaker channels and the sides, they're normally mounted on the walls. In the front, they're either on the sound stage or we build a sound stage so that it sits behind the screen. The screen becomes a perforated screen and then the speakers actually sit behind it."

Configuration of seating also plays an important part in the set-up of your dream entertainment system. "When it comes to big screens and working out the distance between the screen and the first row of seating, it becomes pure art and science in terms of the quality of the projector or the size of the screen; there's a formula for where you need to sit," Sasha says.

"In the old days, you had to sit five metres back; but as technology has progressed, you can actually afford to sit closer in. It really depends of the size of the screen and what the projectors are able to produce as far as quality goes. Every scenario is slightly different. If it's a projector, you'll need to sit further back, but you can sit closer if it's a screen."

With technological advances, the internet can be accessed through modern home entertainment systems. "All of our systems are designed with an IP backbone, so we have the IP connectivity available to stream movie content. That is the future, and a lot of our clients are doing that now," Sasha explains. "It's the same thing with gaming; there's nothing better than playing against your friends from another location on a large-screen format, especially with some decent space so that you can have interaction."

Having a major entertainment set-up can put a substantial strain on your power bills. "We always make sure we've got proper surge-protected equipment, and some of the better systems have remote access, so we can power cycle some of that equipment remotely and get full feedback and data on what's happening with power usage," Sasha adds. "In terms of safety, it is important that everything has good ventilation around it and there are no fire hazards. It's really important that electronics have room to breathe and not get too hot.

"We hide everything. We go to a lot of trouble to make sure the experience is second to none for the customer and ensure there are no cables visible—to create that atmosphere of pressing one button and watching the movie scenario. We like to put all of the equipment into equipment racks, because then we can cable nicely and label everything, so if anything needs to be swapped or upgraded, we can do that very easily and in a cost-effective way."

Your entertainment system can even be integrated into a wide-ranging home system including lighting and security. "We do full automation of lighting control in homes, so it's very common for us to integrate with home security systems," Sasha explains. "So when you come home and turn the alarm off, certain lights will come on at night to get you into the kitchen so you can put your bags down, and so on. The ability to remotely log on to your house and let somebody in is becoming very popular, and we can use automation in security systems.

"It's becoming a lot easier to achieve these things as technology advances and prices come down." ○