

STEP INTO THE



THE MOST INFLUENTIAL CONSUMER TECHNOLOGY TRADE SHOW IN NORTH AMERICA was back, live and in-person, this past January in Las Vegas. The Consumer Electronics Show (CES®) has always been a harbinger of things to come – whether new products survive in the long run (think 3D TV), is another story – and this year's technology exposition demonstrated how connected our cities are becoming vis-à-vis our smart grids, smart vehicles and smart performance homes.

Our *Technology Designer Magazine* team were in attendance as we covered the show's various locations spread out across Vegas, from Smart City and Wellness pavilions to advances in audio, video, kitchen and bath, and interior design products, to gadgets and gizmos, to futuristic technologies that have a real chance of seeing the light of day. Here is a round-up of what we believe will likely impact performance homes as the year and the decade progresses.

FUTURE

smart cities

LiDAR (light detection and ranging - a method for determining variable distances by targeting an object with a laser and measuring the time for the reflected light to return to a receiver) technology was being demonstrated across the Smart City and Smart Vehicle pavilions. Manufacturers and technologists were utilizing the technology for smart mobility, retail flow management analytics, building occupancy management and perimeter intrusion detection.

The autonomous driving presentations ranged from personal vehicle to city-wide truck fleet capabilities. Along with the latest in electric driving and battery storage technology – as well as a smattering of hydrogen-based concepts – the clear message is that autonomous driving is here and will play a fairly large role in tomorrow’s smart grid and smart mobility systems.

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CAPSTONE THIN CAST™ SMART MIRROR

wellness

There was a surge in the volume of technology designed to bolster personal wellness and mindfulness at several Wellness pavilions at CES. The work-from-home sphere seems to be of increasing interest to health technologists, who have devised any number of products that improve life for people indefinitely working from home.

COVID-19 has spurred health systems to shift from in-person care to virtual care, including telehealth platforms and digital health tools such as mHealth apps, smart devices and wearables. Health systems are looking for new platforms to deliver care to the home and connect with patients on demand.

So the importance of a reliable audio/video/camera/microphone set-up in the home office suite increases for those who might be in need of virtual medical attention.

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video

One significant advancement in TV displays was introduced by Samsung. What they are referencing as Matte Display has anti-glare, anti-reflection and anti-fingerprint properties applied to their Lifestyle TVs including The Frame, The Sero and The Serif, providing one of the most pleasant and comfortable viewing experiences we've ever experienced. As a result, the new Matte Display on Samsung's 2022 Lifestyle screens received three verifications from UL (Underwriter Laboratories) for being 'Reflection Glare Free', 'Discomfort Glare Free' and 'Disability Glare Free'.

This might not seem like the evolutionary step that it is on first blush, but go look at your TV and if there is any light in the room, it is glaring across the glass front of your display. Now imagine that it is gone. We stood several feet away from these screens and it was unbelievable how much of the glare and light reflection was eliminated.

So for designers who love The Frame, it just got so much better. And the art so much more realistic.



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kitchen and bath

While CES isn't a hotbed for the category, Kohler made several announcements pertaining to smart home technologies, starting with their commitment to launch PerfectFill this year. The technology has been unveiled at previous events and works via a connected drain and valve kit that helps users draw their perfect bath the first time. The experience itself is driven by the Kohler Konnect app.

For sink control, Kohler announced a line of new touchless bathroom faucets and for the kitchen they have a new faucet dubbed the Purist Suspend, which takes the faucet off of your countertop. More precisely, by bringing it down from the ceiling! Purist Suspend comes with hands-free water control as well as a waterproof Bluetooth puck which can turn the faucet on or off and control temperature.



smart products to watch



HOLO INDUSTRIES

This was the absolute top technology we saw at CES 2022. Something out of the future which is now a reality.

Holographic Touch™ is a huge breakthrough in the art of holography. For the first time, users can not only see a holograph — they can touch it, pinch, scroll, spin and manipulate any image in mid-air. It is a watershed moment for Human-Machine Interaction: Through the genius of Holographic Touch, users can experience a clear, colorful and detailed mid-air interactive experience — anytime, anywhere.

WOODOO

WooDoo is the inventor of augmented wood. WooDoo SLIM, a translucent, tactile and light sheet of wood, is ideal for man-machine interfaces and connected backlit interiors.

WooDoo selectively extracts lignin and replaces it with patented specialty polymers. These new materials have unparalleled mechanical strength, durability, fire resistance and optical properties.





CAPSTONE SMART MIRRORS

The Capstone Connected Smart Mirror performs various functions similar to a tablet and smartphone with both touchscreen and voice interfacing, internet access and an operating system capable of running downloadable applications. As the smart home environment evolves, access to online services and applications through surrounding surfaces are imminent.

OSSIA

This is the latest in Wireless Power Technology. The Cota Power Receiver, embedded into any device, initiates the 'conversation' by sending a beacon signal to find a Cota Power Transmitter. The transmitter then sends power back in the same exact path. This 'conversation' between device and transmitter happens 100x/second, to send power safely to devices at a distance while in motion. All your Cota-enabled devices will receive power simultaneously.



the future

The methodologies of performance homes and the underlying technologies are meshing with the wider world of smart cities and remote wellness strategies. It has never been more critical for builders and designers to insure that technology infrastructures are in place today in order to take advantage of the technologies of tomorrow.

