

# Trailblazing

# into 2021



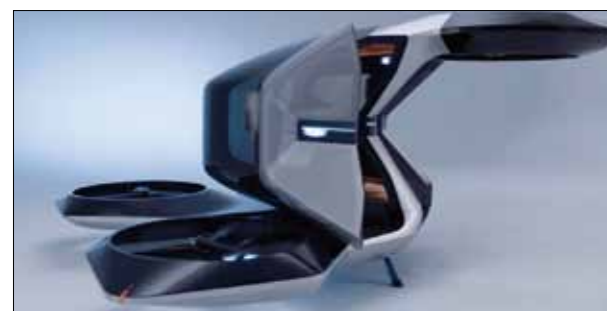
CES is the biggest consumer electronics show on earth.

Trends exhibited here are a forerunner of what is to come in consumer tech, streaming content, health and fitness, smart homes and transportation.

Our writer Jon Mamonski was again honoured as the only Australian journalist on the international judging panel for the CES Innovation Awards

### Hazel unmasked

Covid has inspired some remarkable new gadgets. One of the most eye catching was the hi-tech mask from Razer called the Hazel Project. According to Razer, its the most intelligent mask ever created. Project Hazel has a rechargeable battery that powers an air filtration system on the left and right of the mask and LED lights that can highlight the face of the wearer at night or in dark spaces and RGB lighting in rings around each of the two air filters. Microphones and speakers allow slight amplification of the voice of the wearer that helps with its large plastic shield and allows a natural (otherwise non-masked) audio level. Clear plastic shielding allows your face and mouth to be seen – further aided by the LED lighting within. The battery is charged with a wireless charging case that also provides UV light disinfection. No price or release date as yet.



### GM air taxi

CES wouldn't be the same without some serious out-there concepts like this one from General Motors. This flying car is called the Cadillac Halo eVTL (electric vertical takeoff and landing) aircraft and is GM's potential foray into "personal air mobility" or more commonly known as a flying car. GM joins a number of auto and aviation companies that are striving to be the first with a commercially viable air taxi.



### Almost a living pet

MOFLIN is an AI Pet from Vanguard Industries which possesses emotional capabilities that evolve like living animals. With its warm soft fur, cute sounds and adorable movement, you'll want to love it forever. MOFLIN has a unique algorithm that allows it to learn and grow by constantly using its interactions to determine patterns and evaluate its surroundings from its sensors. MOFLIN will choose from an infinite number of mobile and sound pattern combinations to learn how to respond and express its feelings. To put it simply, it's like you're interacting with a living pet and is a winner of a CES Innovations Award. Expect it for Christmas at around \$500.



### Forest bathing

With a combination of light, fog and aromatherapy, the Kohler Stillness Bath smart bath tub feels like a forest spa experience that is inspired by Japanese forest bathing – or shinrin-yoku – that's designed to relax your mind, soothe your body and renew your spirit. This Kohler Stillness bathtub fills from the bottom of the bat and overflows into the Hinoki wood moat, creating a soothing sound. Surrounded by lighting, the bath's surface then envelops in fog. You can add essential oils into the Kohler Stillness Bath tower which softly emits invigorating aromas. Stimulating the senses and promoting focus, this bathtub gives you a relaxing space to ease your stress and worries for a mere \$13,950.

### DIY lipstick colour

L'Oréal has created a device that gives you the ability to get the exact shade of lipstick you want. Yves Saint Laurent Rouge Sur Mesure, powered by Perso, is a smart at-home device that allows you to utilise colour cartridge sets from YSL's iconic universes of red, nude, orange or fuchsia. With this innovation you can create thousands of bespoke lipstick shades with a single touch. The lid of the device functions as a compact luxury case so you can take your personalised product along with you when you go out.



### Nifty all-in-one work hub

Perennial Innovation Award winner – Dell, have pulled it off again with this clever and compact work hub. Its numerous ports offer a variety of connectivity options, while its built-in speakerphone offers great conferencing convenience. Now you can charge your laptop while being connected to a second display and your keyboard and mouse plus get on a conference call – all at the same time. Sleek and small, its compact design takes up little space so you can easily fit the multiport adapter into your bag and take it anywhere. Simply wrap the cable around the base when you're done. No drivers required. Currently priced at \$250.



### Master laptop

Asus' second-generation dual-screen laptop with the second display stretching across the top of the keyboards is highly adaptable to the application at hand, e.g with Adobe Photoshop, Premiere, Lightroom and After Effect with more on the way. When the user opens the lid, the second screen lifts up to enhance the combined displays and helps with increased airflow and fuller sound. The OLED 15.6 inch and 14-inch screens are magnificent with heaps of CPU and graphics power.



continued >>>



**Help right before your eyes**

Text and directions are coming to your spectacles with Bosch Smart glasses – Light Drive. Compatible with curved and corrective lenses, they deliver a highly intuitive user experience as a convenient display extension, providing an alternative to smartphone or smartwatch screen checking. The optical systems include microelectromechanical system (MEMS) mirrors with ASIC controller that precisely direct a low-power beam of light to the user’s eye and displays the perfect balance of just-in-time hands-free information like navigation, calls and notifications, alarms, calendar reminders, messaging platforms such as WhatsApp and WeChat and everyday note-based information like to-do and shopping checklists for your eyes only, invisible to others. The technology will be available to frame manufacturers this year.

**Phone on the wing**

LG WING is completely different from any other 5G smartphone on the market. You can switch seamlessly between Basic Mode and Swivel Mode any time to enjoy an expanded experience. In Swivel Mode the entire front of the phone rotates clockwise 90 degrees, orienting the 6.8-inch main screen in landscape mode to reveal a 3.9-inch second screen that unlocks new usability and new possibilities to explore. A single application can be expanded to both screens or two applications can be displayed simultaneously – one on each display. Viewing video-sharing and streaming platforms in Swivel Mode allows you to interact with the Second Screen while content plays uninterrupted on the Main Screen. Available now for \$1350.



**Best building security**

This Melbourne-based company is no stranger to winning awards at CES. The new Enforcer 4K quality, 4+ camera security system is a set and forget, reliable multi-camera wired connection that sees faces, license plates and packages via state-of-the-art 4K Ultra HD with powerful digital zoom and night vision up to 40m in colour. The 4 Enforcer Cameras can trigger ‘police-style’ red and blue flashing lights, spotlights, sirens and mobile alerts and you can add four more for 8-camera monitoring. Cameras sense people and cars for more reliable security monitoring and fewer false alarms. You will also enjoy free local recording for up to 180 days onto the 2TB hard drive with no extra fees.

**Smart and fast**

TP Link’s award-winning Deco Voice X20 creates a Mesh Wi-Fi system with a smart speaker that aims to provide you with a whole-house Wi-Fi and voice control experience. Armed with the latest Wi-Fi 6 and Mesh technologies, it boosts high-speed Wi-Fi coverage to every corner of the home, providing seamless roaming as you walk between rooms. Alexa is integrated into the built-in smart speaker, enabling smart home management, voice control, and music playing. Additionally the mesh system also allows you to cast audio between Deco units, ensuring superior Wi-Fi and sound everywhere in the home.



**Which LED?**

The ‘stay at home’ message has sent stream viewing rocketing, making TV the centre piece for home entertainment. In Australia there are more than 15 million streaming-channel viewers. The big brands like LG, Samsung, Sony and TCL have been paying close attention and new technologies were shown at CES this year to convince you that now is the time to upgrade your TV.

The two new acronyms to be on top of are MiniLED and MicroLED. MiniLED may

well replace LCD to become the light source for TVs and flat panel displays like tablets and laptops.

Think about your LED torch shining straight into your eyes – it is very bright. By placing thousands of Mini LEDs behind the TV panel, combined with the ability to dim them for dark scenes, helps deliver more contrast. Black levels are where OLED TVs shine and have an impact on precise colour. Mini LEDs are now closing the gap and available from all the major manufacturers.

MicroLED is still a hideously more expensive solution to manufacture (consumer TV’s starting at \$100,000), involving synthetic LED arrays to individual pixels but unlike OLED which also lights individual pixels, MicroLED can deliver much brighter dynamic range and more impressive contrast. If you have watched any of the TV series on Disney Plus, The Mandalorian – the landscapes are in fact Sony’s Crystal MicroLED screens that created its virtual scenery.



**SAMSUNG**

Samsung is making MiniLEDs the backlight system for its range of new NEO QLED TVs with a striking new innovation – solar powered remote controls. The flagship 85-inch Neo QN900 comes with a bezel-less screen like the infinity screens of its Galaxy smartphone and is rumoured to sell for upwards of \$17,000. It is less than a centimetre thin too with the speakers embedded behind the screen. For the very deep of pockets its new MicroLED TVs, which come in 88, 99 and 110-inches, the latter will be close to \$200,000 and will come with a ‘Multi View’ feature that enables the screen to be split into four separate 55-inch pictures. Each of the four sections has their own separate volume control as well.



**LG**

The world’s leading OLED TV brand is introducing MiniLEDs – calling them ‘QNED’. The ‘Q’ refers to the TV’s use of tiny ‘quantum dot’ crystals to display colours. ‘N’ refers to LG’s ‘Nano cell’ particles used to absorb unwanted light wavelengths to improve colour and viewing angles and the ‘ED’ refers to ‘emitting diodes’. LG is packing 30,000 MiniLEDs in its largest 86-inch screens and pairing up to nearly 2,500 dimming zones and advanced local dimming technology. LG’s best picture quality is in its new OLED ‘Evo’ range with a new Alpha 9 processor that punches up the OLED brightness and can

screen 120 frames a second – important for gamers and sports lovers.

**Stay in bed**

The most talked about display from LG was the transparent 55-inch OLED TV that can reside at the end of your bed. The screen can rise partially or in full to show information or videos while retaining a view of the other side. The panel has built-in speakers using a new sound technology embedded in the frame, LG said. Eventually it will find its way to restaurants and even train carriage windows to show you where you are. No price or delivery times yet.

**SONY**

Sony’s top-of-the-line TV for 2021 will be the Master Series Z9J. This 8K LED TV runs Google TV, replacing Android TV. There is the new three-way stand for versatile placement and available in 75- and 85-inch sizes. Thanks to a new chip, the Cognitive Processor XR, Sony is using AI (artificial intelligence) to respond to how people normally focus on images along with utilising all of its different processing elements and cross analysing all that information to optimise the picture resulting in an outstanding TV display.



**TCL**

The new collection will include 85” displays and 8K is coming to the award-winning 6-Series that will bring 33 million pixels and clarity with Mini-LED technology including OD Zero, or Optical Depth Zero which is the distance (now zero) between the backlight and LCD display layer providing precision contrast and brilliant luminance for their thinnest QLED TVs yet.