Overview

The ongoing evolution of lithium-ion batteries (LIBs) has facilitated the development of a plethora of rechargeable consumer products (including electric vehicles) for just about every walk of life.

As year’s end approaches, LIBs still take centre stage as the world’s fastest growing and most promising source of portable power. Globally, vast amounts of time, money and effort are being invested in creating ‘less with more’ and today LIBs for portable devices are smaller, lighter and pack more punch than ever before.

Meanwhile (as detailed in previous issues), in an increasingly interconnected world, mining companies, technology researchers/developers and battery manufacturers everywhere are scrambling to meet demand for, and lower the cost of, these amazing storehouses of energy.

As the giving season approaches, check out some nifty devices designed with both fun and functionality in mind.

Music makes everything better, and what better way to play it than wirelessly?

Like Apple’s AirPods (but pricier), Sennheiser Momentum True Wireless earbuds ditch pesky wires and anything around the neck. With Bluetooth support, access to Siri or Google Assistant and optional ‘Transparent Hearing’, which blends ambient sounds with the music being played (allowing for conversation or awareness of approaching vehicles), they promise to “redefine the audio benchmark for true wireless earbuds.”

French bulldogs with bling? In this the Chinese Year of the Dog, Jarre Technologies (founded by French composer Jean-Michel Jarre) released 99 limited edition chrome-gold versions of its Aerobull HD1 speaker. Cheaper versions of the fashion-forward HD1 puppy come in red, white or black. Smartphone/tablet compatible, they pack 200 watts of power, 21 amplification and unique ‘Digital Sound Processing’ algorithms. Woof!

Not wearable but eminently portable, the Lexon Mino BT speaker is small in stature but packs a punch in terms of sound quality. With Bluetooth and a USB charger, it’s affordable and beautiful and comes in a range of stunning colours.

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‘I always like the gifts I get, but how I love the gifts I give!’

~ Carolyn Wells
Tech for tots and teens

The Dino-Lite digital microscope comes with the power of surprise – it’s amazing what can be seen! This hand-held device plugs into a computer, laptop, tablet or smartphone, shows from 10x up to 220x magnification and boasts four LEDs to illuminate whatever’s examined.

Sphero BOLT is an educational toy with staying power, designed to get budding programmers off to a great start. With a striking LED matrix and advanced sensors, this app-enabled robot provides endless opportunities to be creative and have fun while learning.

Another fun, educational software-coding toy robot, the Anki Cosmo comes pre-assembled and fully tested, and can perform a variety of tasks when paired with the free smartphone app.

Wearable tech

For those who prefer wearing a watch to a wrist-type fitness tracker, the second-gen Oura Ring could be an alternative. Sleek and discreet, it monitors sleep, heart rate, body temperature, respiratory rate, steps taken, calories burned and more.

And finally ...

Wary of overindulging at Christmas? Lumen may be the answer. Another crowd-funded device nearing release, it’s designed to track and monitor metabolism through the breath, advising users on what to eat (and when) to reach their weight loss and fitness goals. Too good to be true? Wait and see ...

Tech for pets

Stimulate bored, home-alone pets with the crowd-funded Mia pet robot, founded on the idea that a curious pet will follow it around, deriving mental and physical stimulation in the process. Guilty pet parents can program it to dispense treats and it shuts off automatically if tipped over. Optional extras include the Wi-Fi equipped WoofBox, which notifies owners when their dog barks and can distract the animal when it does so, and the MiaCam, for those wishing to spy on their pet/s remotely.

Which Perth-based company recently manufactured LiBs from processed mine waste?