

# ELECTRICAL GEMS

THE SECURITY ISSUE

## SAFE MODE

SECURITY'S NEVER  
BEEN MORE  
IMPORTANT



**SAFETY NET**  
HOW TO PROTECT  
YOUR BUSINESS  
ONLINE P36

**TOOLING UP**  
YOUR TOOLS ARE  
YOUR LIVELIHOOD.  
LOOK AFTER 'EM P24



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ELECTRICAL GROUP



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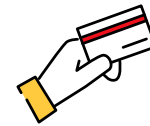
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9 JANUARY - 9 APRIL 2023

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### PACK

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LRSENS23



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LRCONTROL23



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THE COMPLETE  
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PACKS

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# Working together to supply the electrical industry



## WE ARE GEMCELL *your homegrown team!*

We are Gemcell, **Australia and New Zealand's largest electrical wholesale group**, with a growing network of more than 360 branches covering every state and territory.

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- For more than 30 years, we've been empowering local independents to compete against their foreign-owned rivals.
- Our long-standing affiliation with international electrical wholesale group IMELCO leverages our local knowledge in an increasingly global market.



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*powering electrical contractors in Australia and New Zealand*

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Many of our Members are family businesses, with knowledge, commitment and passion being passed down from generation to generation, ensuring you continue to receive quality customer service and expertise for years to come.



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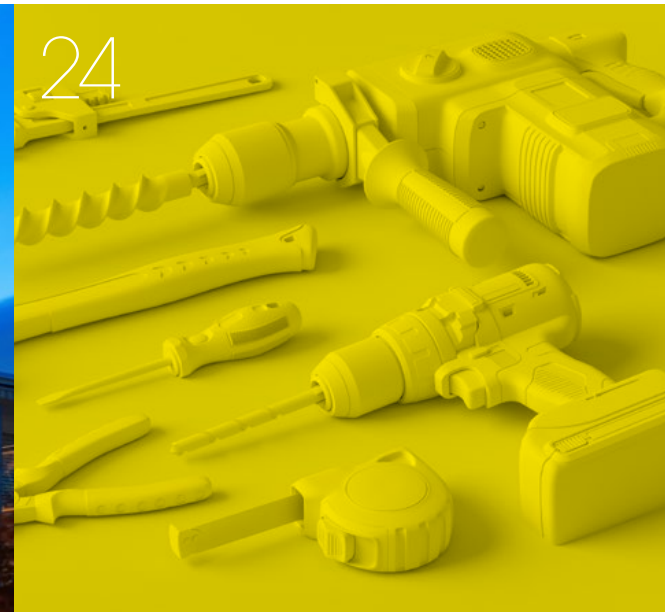
**NOT ALL PRODUCTS ARE AVAILABLE AT ALL BRANCHES. RAINCHECKS AVAILABLE ON SELECTED ITEMS. SPECIAL PRICES AVAILABLE TO ACCOUNT CUSTOMERS ONLY 01.02.23 - 31.03.23 OR WHILE STOCKS LAST.**

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MEMBER OF



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# TEAM AU

SUPPORTING YOUR HOME-GROWN TEAM BOOSTS LOCAL JOBS AND THE ECONOMY. TOGETHER WE WIN.

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51



With our domestic and global connections, we have all your cable needs in hand.



Given the supply & demand issues we all face in this current climate, Prysmian Australia are strongly positioned to offer the widest possible range of products, services, technology and simple know-how, due to our domestic and global connections. We remain adaptive to the current situation.

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WITH CYBER BREACHES RAISING THE SECURITY STAKES, IT'S IMPORTANT WE MAKE SURE ALL ASPECTS OF SECURITY ARE COVERED – FOR OURSELVES, AS WELL AS OUR CUSTOMERS AND CLIENTS.

**W**elcome to the first issue of a brand new year, and if the last one's anything to go by, cybercrime is going to be high, high up on our agenda of things we're talking about constantly, but would rather not be. Last year, Optus and Medibank hit the headlines for all of the wrong reasons, with customer data, including very personal health info, being stolen by Russian hackers and put up for sale on the dark web. Ransoms were refused – common sense dictated so – and it just went to emphatically underline, if any emphatic underlining was needed, that cybercrime is a very, very real threat to all of us. Now, of course, we've all become reliant on the internet to run our businesses, communicate with customers and run our personal lives. It's now impossible to imagine how

we'd operate if the cybersecurity threat was deemed too great, and the plug was completely pulled. So, it's essential for every business to take things seriously – cybercrime isn't a minor risk, it's a clear and present danger. It would be easy to fall into a trap of thinking these cybercrims are only after big businesses with hugely valuable data and the ability to potentially pay extortionate fines. And falling into that trap would be an incredibly naive thing to do. Because, while your business probably can't be held to millions or billions of dollars in ransom, the harsh truth is that it's considerably easier for cybercriminals to get into. Yes, the Optus and Medibank attacks were specifically targeted, and the made-up Kev's Electrical from Mudgee doesn't hold the same appeal (sorry made-up Kev), but for these criminals, it's a numbers game. Millions of scam emails, social media hacks, scam phone calls, text messages and everything else are made every day, and a small, small percentage of them work. That's all they need, though. And once they're in, they're in. And it can have catastrophic consequences for you and your business. That's why we've dedicated a big old section of our Security Issue to help you get a grip on your cybersecurity. Training your employees is key – and they need to be on the ball, day in, day out. Of course, cybersecurity is only one part of the security equation, and for you and your customers, keeping your homes, businesses and possessions safe is a major priority. We take a look at some of the products that are helping people do just that, and meet the brains behind the brands developing those security items. We also take a look at crime stats in Australia, the legalities behind recording people without their permission (hello, security cameras) and get a few tips on keeping your tools safe. It's a dangerous world out there, and when you can't even see the crooks that are targeting your worldly goods, it's all the more difficult to monitor and prevent. But your systems and your people are key. The former, you can call in the experts to help assess and upgrade. The latter are down to you.



HERE FOR AUSTRALIAN SPARKIES SINCE 1920.

Check out and follow the ever growing community of like-minded sparkies on social! #ClipsalTrade

Now more than ever, it's important to stick together, share our experiences and work through ideas for staying strong and supporting the electrical industry.

The Clipsal Trade social channels are dedicated to you, so get involved!

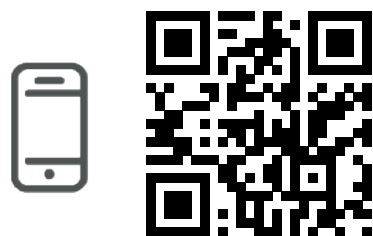
Featuring:

- Aussie sparky stories
- Tools & checklists
- Business tips
- Opportunities to upskill
- Products that position your business for success
- Live sessions and much more

Our goal is to bring the electrician community together, so have a chat with your mates and join us now.



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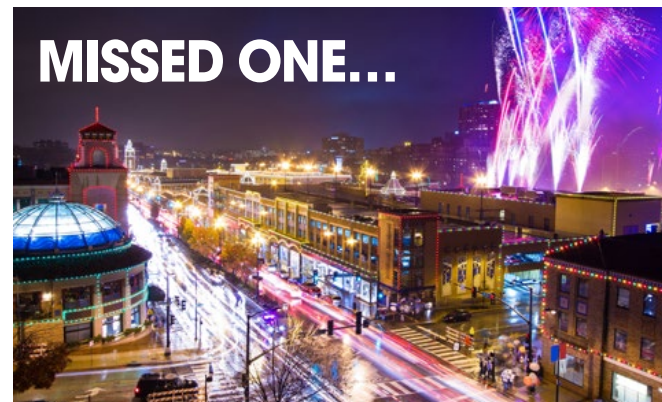
NEWS



# ELECTRICAL NEWS FROM AROUND THE WORLD

THE SERIOUS, THE QUIRKY, THE DOWNRIGHT RIDICULOUS.

## MISSED ONE...



Now, we've all had those dull jobs. Those boring jobs. Those repetitive jobs. But spare a thought for US sparky Matt Deardorff. Every Thanksgiving night, it's been Kansas City-based Matt's job to test every single light bulb prior to the famous Energy Plaza Lighting Ceremony. And he has been doing so for the past 16 years.

Each year, the event turns Kansas City into a spectacular lighting display thanks to thousands and thousands of light bulbs strung around buildings. The event is now in its 92nd year and is a firm favourite across the state. And, if a light bulb's not working, you now know who to blame. Matt.



## ON THE BUSES

Over in Hong Kong, electric buses are slowly but surely taking over after advances in battery tech made the buses a viable alternative to their diesel counterparts. KMB, the biggest bus operator in the country, will have 80 electric buses on the road this year, and by 2025 that number will have increased to 500. Given that buses and trucks account for more than half of HK's transport-related carbon dioxide emissions, that can only be a good thing.

## KNOW YOUR WORTH!

It's official... electricians are one of the most crucial professions in the country - when it comes to our transition to renewables, that is. The Federal Government has all manner of renewable targets to hit by 2030, but according to a report from Infrastructure Australia, a massive workforce will be needed to construct and install everything that's required. And that workforce is primarily made up of electricians, engineers and construction managers. The renewables industry is estimated to need 15,000 new workers in the next five years, and scaling up that workforce is understood to be the biggest hurdle. So, about that pay rise...



## TIKTOKKING ALL OVER THE WORLD



A female electrician in the UK has quickly gained a global audience of almost 250,000 followers on TikTok by posting content about her life as an electrician and busting some sexist stereotypes as she goes. Manchester-based Isabell McGuire, 17, was the only female in her class at technical college and now works alongside her sparky dad. Unsurprisingly, the social media comments are littered with lazy innuendos - "I feel a spark" being a favourite. But by promoting herself as an electrician, it's opening people's eyes to the opportunities the industry has to offer for everyone.



## DOES THAT GO IN THE RECYCLING?

Volvo Trucks has always been good to keep an eye on - who can forget the Jean-Claude Van Damme leg split ad? - and now they've taken sustainability to the next level with their fully electric commercial trucks made from fossil-free steel.

The steel that the frame rails of the next-gen trucks are made from is produced with hydrogen, and the company says that as availability of fossil-free steel increases, so too will its presence in their vehicles.

As a result, 90 per cent of Volvo Trucks can be recycled and around 30 per cent of the materials in the next-gen trucks come from recycled materials.



## FIT FOR A KING, IT SEEMS

Within the vast amounts of, well, everything that good King Charlie has inherited from his mum is a hydropower scheme at one of Liz's favourite residences, Windsor Castle.

Back in 2011, a water turbine project was installed to generate electricity for the castle, which dates back the best part of 1000 years.

Two, four-metre Archimedes Screws provide around 40-50 per cent of the power needed for the property, and cost £2.4m - around AU\$4.2m - to install.

Wonder how long it'll take them to be up on that investment?

## POWERED BY... SAND

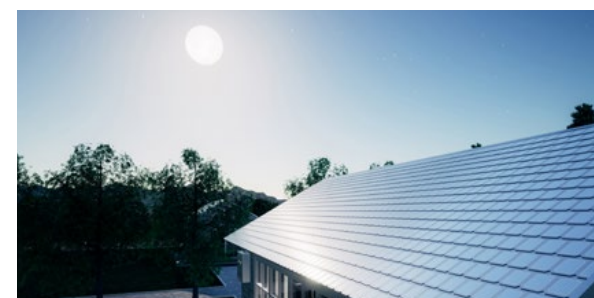
Over in Finland, the town of Kankaanpää has been making news, as home of the world's first sand battery.

The 23-foot tall steel battery is full of 110 tons of sand and heat transfer pipes, and is charged by excess energy from solar and wind projects. The sand in the unit can reach 600°C, enabling it to store several times the heat than a water tank of a similar size.

The sand is charged, and the electrical energy is transferred to the heat storage using closed loop air pipes.

The battery is currently being used to power the town's swimming pool, and the possibilities of further development are being explored.

Given sand can be heated as high as its surrounding materials will allow, it's got potential!



## A GLIMPSE INTO THE FUTURE

Solar panels have become a fixture in our towns and cities, but could they be something that we look back on as being very much 'of their time'?

You know when you look back at 80s New Yorkers walking around with those 'brick' phones? Or pics of smoke-filled pubs?

Well, the same thing could well happen with solar panels, because the next generation of solar panels won't need a roof to be installed onto - they will be the roof! A company in San Jose, US, has created the Timberline Solar - a solar shingle that is installed like a normal roof, and generates power at the same time.

Makes sense.

POWERED BY *dahua*

# EZ-IP

## CCTV Camera Kits

Easy to install and operate, these quality Dahua EZ-IP Kits are ideal for safety & security in small to medium size applications like homes, small retail shops or businesses.



### APPLICATIONS

- Homes / Garages
- Small Retail Shops
- Small Businesses



Includes  
4 x 6MP  
Turret Cameras



Options  
4 Channel NVR  
8 Channel NVR



### CONNECTIONS

- 4 or 8 PoE ports
- Connect to Monitor, Modem or Smart Phone via app



### FEATURES

- H.265+/H.264+ codec decoding
- Max 40Mbps/20Mbps incoming/outgoing bandwidth
- Up to 6MP resolution preview & playback
- HDMI/VGA simultaneous video output



4 Channel or 8 Channel NVR Kits available.  
Each kit includes NVR, Hard Drive and 4 x 6MP Turret Cameras.

SECURITY

Distributed by



[www.omegapower.com.au](http://www.omegapower.com.au)



NEW PRODUCTS

# NEW GEAR

THE LATEST PRODUCTS – AND SOME ARE UP FOR GRABS, TOO!

### BAILEY INDUSTRIAL TWIN PLATFORM 4 STEP FIBREGLASS LADDER

The innovative Industrial Twin Platform from Bailey Ladders, enables the user to have two large, safe and stable standing platforms, which increase flexibility and versatility around the worksite.

**GIVEAWAY**

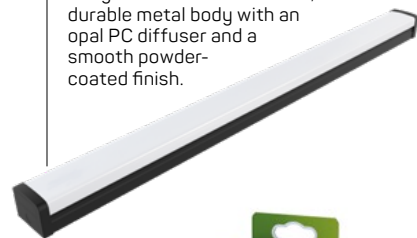


### VENTAIR SPYDA EC

This slimline version of the iconic Spyda Fan has an electronically commutated (EC) brushless motor that uses 75 per cent less energy than a comparable AC fan. Compatible with Google Home and Alexa.

### ENERGETIC LIGHTING STELLAR V BATTEN

The Stellar V Batten now comes in powder-coated black, so no more manual spray painting on site. Each fitting comes with five colour temps and up to eight wattages, as well as an integrated flicker-free driver, a durable metal body with an opal PC diffuser and a smooth powder-coated finish.



### PSA INTELLINK SMART SWITCH

The Intellink Smart switches allow you to take control of home lighting wirelessly without the need to change out every bulb, LED downlight, and pool light. Easily adapts to most common Gang switch designs by popular brands such as Clipsal and HPM.

**GIVEAWAY**



### CLA LIGHTING SMART FLOOD LIGHT 30 WATT IP65

The tuneable RGB colour spectrum floodlight works with any 2.4GHz enabled WiFi network. It can be controlled from anywhere via an app, from which scheduled plans, biorhythm and timing can be created to automate your home.

**GIVEAWAY**



### TRADER BEAR RANGE OF FULLY INTERCONNECTABLE WIRELESS SMOKE ALARMS

This new range includes hard wired, battery only, or wireless-ready and cable free options, all of which make interconnection easier for the installer.

**GIVEAWAY**



### SCHRÉDER IGNEOUS HIGH BAY LIGHTING

The Igneous range offers selectable wattage, CCT and distribution, with up to 200lm/W providing energy and cost savings.



### PHILIPS ULTRA EFFICIENT LED LAMPS

The new Philips A-class LED bulb offers up to 60 per cent energy savings, 3.5x the lifetime compared to standard LED bulbs, and a payback time of five months when upgrading from halogen bulbs.



### HAGER WEATHERPROOF SWITCHES AND SOCKETS

Available in cool white or grey, these UV stabilised switches and sockets are made from a strong impact resistant polycarbonate material that will not 'yellow' over time. Easy to install, with two single screws fixing the top cover to the base.



## SHADOWECO LED FLOODLIGHT



- Aluminium LM6 body with excellent heat sink capability
- Bonus bracket for corner mounting
- Anti-fog diffuser with breather in-built cable gland
- Available in:

**SHADOWECO30CSLS** 15/30W up to 3300LM 3000K, 4000K, 6500K  
**SHADOWECO50CS** 50W up to 5290LM 3000K, 4000K, 6500K

COLOUR SELECT

LUMEN SELECT

IK08 Impact Rating	IP65 Ingress Protection Rating	CRI 80 Colour Rendering Index	50,000 hr Lifetime	3 Year Warranty	VEET / IPART

## VANDALED CS

- IK10 polycarbonate RAL9007 body with opalized diffuser
- Five optional cable entry points
- Stainless steel screws retained in silicone seal, providing IP65 protection
- Built for tough Australian conditions and tested at 50°C
- Available in:

**VLED20ECS** Vandalized PC 20W Non Dim Colour Select 3/4K



COLOUR SELECT

IK10 Impact Rating	IP65 Ingress Protection Rating	CRI 80 Colour Rendering Index	60,000 hr Lifetime	5 Year Warranty	Ta 50 Operational Temperature Rating

WANT TO WIN?

### GRAB YOURSELF A GIVEAWAY!

Keep an eye on the *Electrical Gems* Facebook page in February and March for posts giving away these products.



Scan QR





# Save time with a trusted brand!

B&R's pre-wired switchboard range will save time and minimise the risk of delays at the job site!

Infinity 3G pre-wired range:

- In-stock, ready to go when you need it
- Single phase and CT options
- Standard designs available for QLD, NSW and VIC
- Robust construction to ensure long service life
- Compliant to state supply authority regulations and AS/NZS 61439 requirements.

Speak to your local Gemcell branch or visit [brenclosures.com.au/3gx](https://www.brenclosures.com.au/3gx) for more information about the pre-wired switchboard range.



Images shown are for illustrative purposes. Some included components are not shown.

**PRE-WIRED SWITCHBOARDS ARE IN STOCK NOW!**

WHAT ARTICLES WOULD YOU LIKE TO SEE?  
LET US KNOW: [EDITOR@GEMCELL.COM.AU](mailto:EDITOR@GEMCELL.COM.AU)

**THE SECURITY ISSUE**

## OPEN TO QUESTION

OUR HOMES AND BUSINESS PREMISES ARE ALWAYS POSSIBLE TARGETS FOR THIEVES – SO WE GOT SOME TIPS TO KEEP RESIDENTIAL AND COMMERCIAL BUILDINGS SECURE.

### OUR PANEL

**CHRIS FORD**  
GENERAL  
MANAGER  
MARKETING  
& COMMS,  
COMPARE THE  
MARKET



**BEN DEWSON**  
CEO OF NHN  
GROUP



**1 How much of a problem is residential and commercial property crime in Australia?**

Hundreds of thousands of Australian households experience a break-in every year, so we shouldn't become complacent when it comes to home security. While the latest figures from the ABS show that break-ins have decreased by 29% in the last 12 months, 113,000 households still had something stolen and 79,600 had property damaged. It's a real concern.

**2 What are some of the most common ways to break into buildings, and what are thieves after?**

Many of us worked from home during COVID-19 lockdowns, but as we return to the office and start travelling again, it's important that we don't let our security standards drop. Commonly stolen items include jewellery and clothing, sporting equipment and bicycles and money, wallets or purses. However, nothing is off limits to thieves.

**3 What sort of preventative measures are most popular from a technology perspective?**

Our latest data shows that there's actually been a 3% increase in homes with cameras compared to the same time last year, as technology evolves. In fact, 42.6% of Australians have alarms or cameras installed at home. Of those, 16.4% of homes say they have alarms installed, 13.8% say they have cameras and 12.4% say they have both alarms and cameras in place.

**4 What practical things can people do to minimise risks?**

If you do have an alarm, add generic security signs or stickers to warn thieves that a loud, alarmed security system may go off if they enter. In addition to the usual lock and key, consider barrel bolts, chain locks, deadbolts and smart locks. And be aware that anything you post on social media when you're not home could be inviting thieves into your home.

**5 What's your best piece of advice for anyone who has commercial or residential property from a security perspective?**

When searching for a contents insurance provider, always list any security measures you have in place, as some insurers may be able to offer you a lower premium. Insurers may also deny claims if you haven't taken reasonable measures to protect your property, so always keep this in mind.

Residential and commercial property crime is one of the most common crimes experienced in Australia, with over 40,000 reports made to NSW Police each year. Break and enter is an offence that is a significant problem for households and businesses, and results in substantial costs to both the community and the Government.

Most petty thieves are opportunistic and will look for easy ways, like doors or windows left open, ajar, or unlocked. If thieves need to break in, they will look to do this with minimal to no noise or fuss, so a floor-level window or door that is not easily seen or is out of the way of regular foot traffic is ideal.

External CCTV and an alarm system with back-to-base monitoring are the most popular. Systems easily installed and controlled from a smartphone are very popular also and most allow for two-way audio communication as well as video.

Have an overt sign displayed saying there is an alarm active. This is not a failsafe, as opportunistic thieves may factor the alarm going off and being able to 'get in and get out' with what they intend to steal before security or police arrive, but it does make premises less appealing. Ensure doors and windows that are not used regularly are secure or locked.

Have a set, consistent process for people to follow and document it if necessary. Have visual prompts/reminders, e.g. a sign on the inside of the main door saying 'Please lock the door' or 'Have you set the alarm'.





Grow your business  
with new leading-edge  
smart home safety  
technology



EARN POINTS  
ON THESE  
PRODUCTS  
(SEE P30)

## CLIPSAL<sup>®</sup>

Introducing the new design award winning Clipsal Wiser Lithium Battery Smoke Alarm. Combining smart home functionality with important safety features to offer increased control and peace of mind for your customers.

-  Flexible applications with RF and Zigbee connectivity for stand-alone use or use with Wiser systems
-  Robust new dual spectrum smoke sensing technology
-  Wiser smart home app connectivity for automated control and notification alerts
-  Simple to install – slotted mounting holes and easy alignment



CLP599WSAL



Order the new Wiser Smoke Alarms by requesting CLP599WSAL through your local Gemcell branch today. More models coming in 2023.

[clipsal.com/wiser/electrician](https://clipsal.com/wiser/electrician)

Life Is On | **Schneider**  
Electric

# DODGY BUSINESS

GETTING YOUR TOOLS NICKED OR FALLING VICTIM TO AN ONLINE SCAM IS AN ALL-TOO-COMMON HASSLE FOR CONTRACTORS. HERE ARE SOME OF THE BIGGEST HEADACHES AND HOW TO AVOID BECOMING A VICTIM OF TRADIE CRIME.

**W**hether you're flying solo or employing a few people, it's hard work running a small business – and dealing with dodgy people only makes it more difficult. Crime,

whether it's theft, scams, property damage or fraud, costs small businesses millions of dollars each year.

Tool and materials theft are huge issues for tradies and the construction industry, with an estimated \$650 million worth of equipment nicked each year in Australia.

And with the back end of most businesses going online, a growing number of crafty scammers are getting smarter and more >>

brazen, posing as legit clients who are anything but.

**THIEVES IN THE NIGHT**

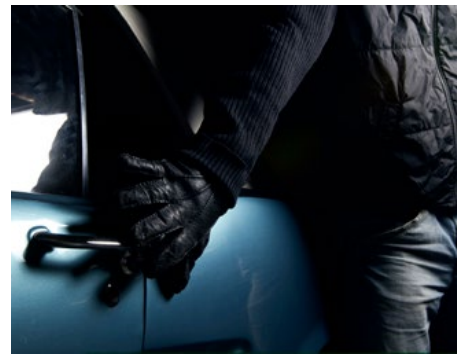
Brendan Tymms from Valley Electrical Group in Melbourne, which employs five staff, has had his equipment stolen not once but twice. “I was parked at night out the front and got up in the morning and realised the van door was open and everything was gone,” he says.

“The second time, I got up in the morning and saw that they had taken the van window out, then climbed in and helped themselves. They got away with probably \$10,000 to \$15,000 worth of equipment each time.”

The worst part, he says, is he’s not alone in being a victim of theft. “It’s happening all the time. I always hear about someone losing their tools or their car getting stolen for the tools or chippies losing their trailers,” Tymms says.

“Out of all my tradie mates, I would say 60 to 70 per cent have had their tools stolen or something happened to them at some stage.”

And it’s not just tools that thieves are after. “Cable theft is a really big issue,” Tymms says. Like tool theft, the hassle extends beyond the cost of replacing lost cables and equipment. When you don’t have what you need in place to get the job done, projects are delayed, clients get narky and cash flow can become an issue.



“The biggest one is the timing of when you find the cables are gone,” Tymms says. “If you’ve done a rough-in and you’re finished and not back until after plaster, and then you come back after plaster and realise all your cable’s been stolen, then you’re in a bit of trouble.”

“If it’s found early enough, it’s just reinstalling it and the time that takes. But if it’s found later, there’s damage that will be caused by re-running those cables.”



**YOU’VE BEEN SCAMMED**

When you’re off the tools and getting your books in order, the biggest issue for electricians is online scams, says Chris O’Brien from Leolec in Brisbane, who also employs a team of five.

“Across email and phone call scams, I’d say I encounter probably four a week,” he says. “I’ve had discussions with other tradespeople, and they say it’s pretty commonplace to be called out of the blue and attempt to get run through a scam.”

From fake invoices and payment details on genuine invoices being changed, to jobs that just sound a bit ‘dodgy’, there are a

whole host of scams targeting tradies. An increasingly common one, according to the Australian Cyber Security Centre (ACSC), is for hackers to infiltrate your email and contact all customers asking they update the payment details they hold for you. A note on your invoice saying payment details would only ever be changed after a video call may protect you against that one.



**SIDE-STEPPING CRIME**

The best advice for steering clear of scams is if it looks even the slightest bit suspicious, it probably is. “Be sure to verify requests for work and be careful who you speak to on the phone,” O’Brien says.

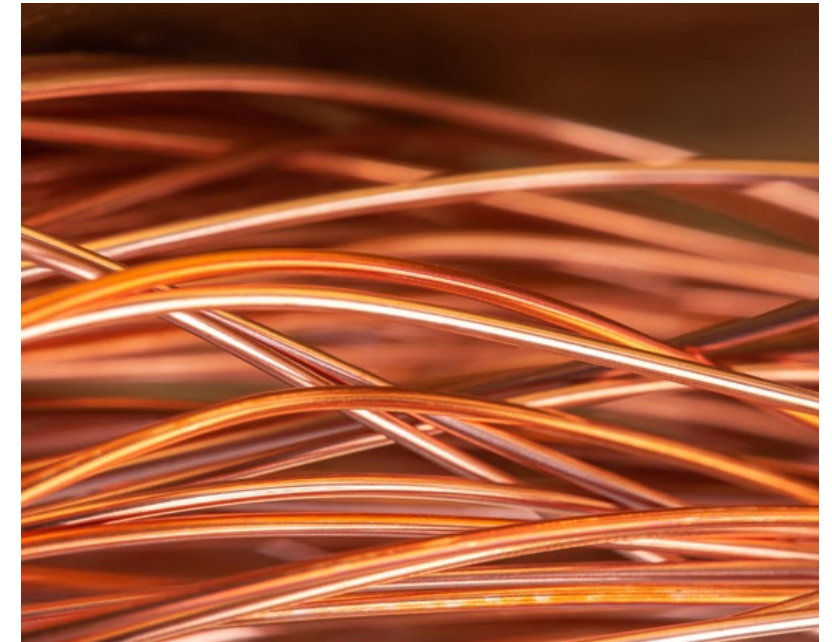
As for protecting your tools, insurance is non-negotiable. “As

part of our business insurance, we have insurance that covers tool theft,” Tymms says.

O’Brien recommends making a list of all your equipment, recording serial numbers and taking photos to ensure you’re fully covered in case of theft.

“It’s a real pain in the bum to do, but as long as you’ve got all that information listed, if you have stuff stolen and file a report with the police, you can at least take the list to your insurer and face fewer hurdles to get the stuff replaced in a timely fashion and get back to work.”

And try not to make it too easy for thieves to grab your stuff, Tymms says. “The boys know not to leave stuff on display so it’s in clear sight,” he says. “If we’ve got some big cables that we’ve had to run somewhere, we’ll put something over the top of it.” ■



**THE CABLE FACTOR**

COPPER PRICES ACROSS THE WORLD HAVE BEEN INCREASING DRAMATICALLY OVER RECENT TIMES – MAKING CABLING MORE AND MORE ATTRACTIVE TO THIEVES.

Last year, copper prices hit an all-time high of US\$10,512 per metric ton – an incredible 130 per cent growth since March 2020. The increase in prices came primarily from high demand from China, and low copper inventories. While the prices are expected to settle a bit over the next few years – it’s expected to be priced at \$8250 per metric ton in 2035 – copper consumption across the world is forecast to increase from its current 26,000 metric tons to more than 28,000 metric tons by 2027.

The rising value of copper, of course, means cabling is a very appealing prospect for thieves – and you need to keep your cabling secure. For example, police in Victoria have reported an increase in cable theft – both from electricians and from the ground. “Thieves will go into a pit in the ground, or anywhere that the copper

forms part of the infrastructure, and strip out hundreds of metres of it,” Crime Stoppers Victoria chief executive Stella Smith told the ABC. “They’ll then cash it in for \$5 to \$8 per kilo at unscrupulous scrap metal yards or online.” It’s not just Victoria, however, that’s experiencing copper theft – right across the country, news reports regularly feature the crime, as well as the lives of some copper thieves coming to an untimely end. It’s incredibly risky business, after all.





## THE MOST STOLEN VEHICLE IN AUSTRALIA

Every year in Australia, more than 47,000 vehicles are nicked – that's around 130 every day. The good news is vehicle crime is falling – they're more difficult to get into (if they're locked...) and easier to trace.

But what are the most popular cars for thieves here in Australia?

1. **Holden Commodore**
2. **Toyota Hilux**
3. **Ford Ranger**
4. **Holden Captiva**

In terms of location, meanwhile, Queensland is the state you're most likely to get your vehicle nabbed from, with Brisbane being Australia's car crime capital.

While car crime is declining, however, more and more vehicles are being taken from inside residential garages – so even if your vehicle's locked indoors, make sure it's still locked up.

## 5 WAYS TO MAKE YOUR PREMISES THAT BIT LESS APPEALING FOR THIEVES



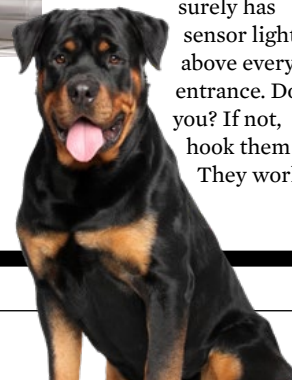
### 1 Pot plants and Venetian blinds

If you've got office windows that a thief could potentially enter through, put pot plants on the windowsill. Together with Venetian blinds, they make the challenge of getting in through a window all the more difficult... apparently.



### 2 Beware of the rottweiler

Even if you don't have a dog, get a sticker warning people



that a vicious beast lies within. It will make potential thieves think twice. Leave a water bowl outside to complete the illusion.



### 3 Sensor lights

Every self-respecting sparkie surely has sensor lights above every entrance. Don't you? If not, hook them up. They work.

### 4 Tidy up!

An obvious one, yes – but remove temptation. Don't leave valuable goods in would-be crooks' line of sight. Remove temptation!

### 5 Lock it up

Make sure everything's locked up at night and alarms are set. Ensure someone's accountable for doing security checks before leaving the office each day, and it's not left on the presumption someone else is doing it.



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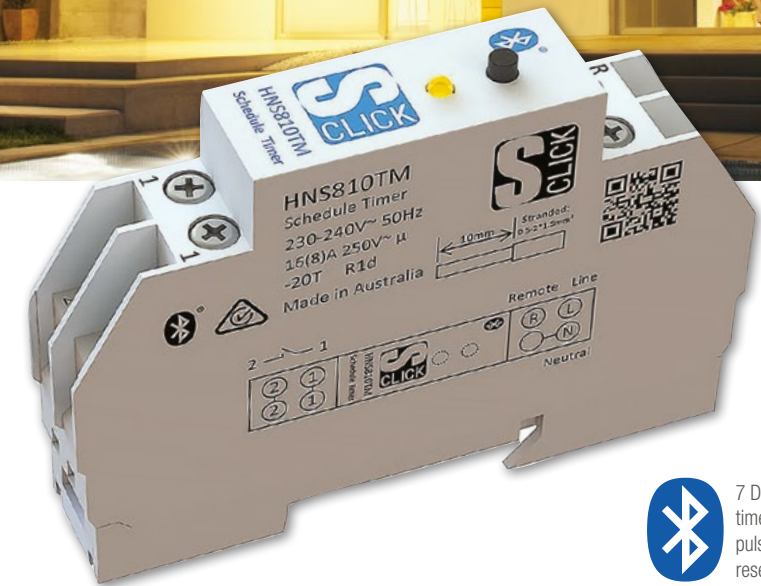
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Part No. HNS810TM

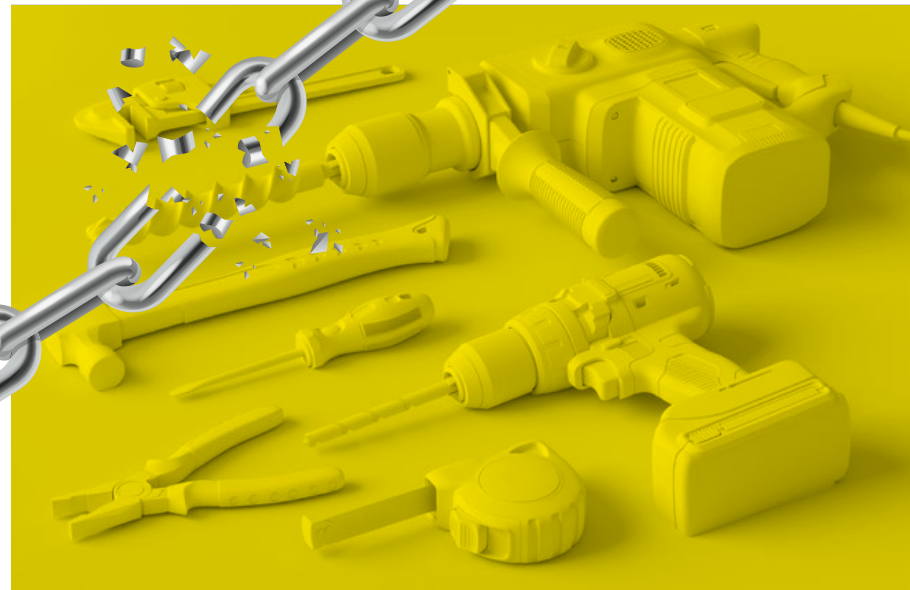
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# PROTECTING YOUR TOOLS

THEY'RE YOUR ARMS AND YOUR LEGS – WITHOUT THEM YOU'VE NOT GOT A BUSINESS. BUT OFTEN WE DON'T GIVE OUR TOOLS THE PROTECTION THEY DESERVE.

## TRADIE INSURANCE CLAIMS: TOOLS

Sixty per cent of tradies have experienced tool theft during their careers, so it's no surprise that when it comes to tradies' insurance claims, one area stands out: tools.

According to stats from Traderisk.com.au, 45 per cent of tradies' claims are a result of

tool theft. In reality, the percentage of tool theft will be far higher – Traderisk says nowhere near 45 per cent of its clients take out tool insurance, so a significant number of thefts will go unclaimed on insurance.

Tool theft costs the construction industry in Australia \$650m per year, and less than

25 per cent of stolen tools are ever recovered.

Keeping tools and equipment safe is, therefore, a massive challenge for any electrician. If you lose them, you can't work – simple as that.

It's unrealistic to take everything out of a fully kitted out work van every night, and when you're working on site it's sometimes difficult to keep an eye on every tool you've got out.

The vast, vast majority of tools claims are made as a result of theft – only six per cent result from damaged tools (typically fire, vehicle collision or rollover).

Of theft claims, 48 per cent come from forced entry, 20 per cent from padlocks being cut, 16 per cent from windows being smashed and 11 per cent from vehicle theft. The remaining claims were classified as 'other', while the average claim totals more than \$4000.

It just goes to show that tool thefts aren't limited to the 'easy pickings' and thieves don't rely on tools lying around unguarded. They're prepared to break in to your property, steal your vehicles – whatever it will reasonably take.

Keeping your tools safe is a challenge that's not going to go away, either. Data from AMI Insurance in New Zealand shows claims for stolen tools have risen by 63 per cent over the past two years.

As we all know, good tools come with a pretty hefty price tag, and therefore they're always going to be attractive to thieves – but there are a few things you can do to minimise the risk.

It's worth it – after all, it's not just the value of the tools themselves at stake, but the lost work, too. ■

## HOW ARE TRADIES' TOOLS BEING STOLEN?



**48%**  
Forced entry



**20%**  
Padlocks cut



**16%**  
Windows smashed



**11%**  
Vehicle theft



**5%**  
Other



**\$4000**  
Average cost of tradies' tools claims

\*Data from Traderisk

## 10 TIPS TO PROTECT YOUR TOOLS

### DO THE ADMIN SIDE OF THINGS WELL

Bit of a boring one to start with, but it's important to have good records of everything you own. Receipts, photographs, descriptions and serial numbers should all be recorded somewhere safe. When you've got a few people using equipment day in, day out, keeping an inventory of what the business owns is a smart thing to do anyway, but by keeping the pictures and receipts, you can help speed up any insurance claims too.

### KEEP THINGS LOCKED UP

An obvious one, but you'd be surprised at how many people don't secure their tools as well as they should. Toolboxes should be properly fixed to your ute. The padlocks should be strong and robust – if it can be cut by a bolt cutter, it's not good enough. Don't forget to check the hinges on tool boxes too – if they're a bit flimsy or can be picked apart, you're giving people an easy 'in'.

### DON'T ADVERTISE YOUR TOOLS!

Sometimes, leaving your ute on the street overnight is unavoidable, particularly if you live in the city, but if it's at all possible, always park your work vehicle containing your tools in a garage. Failing that, park it in your driveway or the side of the house, and block it in with another car, if possible. If you've got to leave it in your driveway, make sure you've got security cameras set up to catch anyone snooping about. If you have to leave it on the street, follow the usual safety precautions, such as parking it in a well-lit spot.

### MARK YOUR TERRITORY

All we can do is try to make it as difficult as possible for thieves to steal our tools – we're never



going to be able to reduce the risk completely. So, marking your tools is a good habit to get into. Putting your own stamp on your tools is always useful, especially on site when things can go



walkabout. The police advise engraving your driver licence number onto your tools so they can be easily identified. If you want to take things one step further, tech such as data dots can help. Data dots are sprayed onto your tools and the info is stored on a database. If the tools are stolen and then recovered, they can be scanned and returned to you. Think of it like a pet microchip for tools. UV pens can be a useful alternative – just make sure you use a good one. The cheapo products aren't any good.

### CAUGHT ON CAMERA

Cameras around your property are a good idea to deter thieves generally – cameras in your van can catch crims in the act, and even if you don't prevent them stealing your gear, you can stop them doing the same to other people.

### USE GPS TRACKERS

GPS trackers can be installed on tools of all different sizes, so if they're nicked, you can track down their whereabouts.



### OFFER A REWARD

On your tools, you could engrave a reward offering – it might help get them back into your hands should they go missing.

### PERSONALISE THEM

A great idea is to give your tools a unique look. Use fluorescent spray paint and childish stickers and graphics – all sealed by a clear coat – to give your tools a very individual look. They're not going to be anywhere near as attractive to thieves as they'd be very hard pressed to sell them on – and they're not going to be 'accidentally' picked up on site, either.

### COVER BRAND NAMES

Certain brands are more appealing than others – so a bit of black tape over brand names can reduce the instant appeal, too.

### INSURE THEM

If all else fails, it's smart to have some insurance – that way, if your tools are taken, at least you can get back to work without losing a significant amount of money at the same time. Don't assume your tools are covered under a general

contents policy – there could be strict limits, if they're covered at all, so a standalone policy is something worth investigating. ■



## THERE'S AN APP FOR THAT...

Looking for an easy way to record details of your tools? Good news – there's an app for that. Tool Protect is an Australian-based app that enables tradies – or anyone with a lot of tools – to store their details so if something goes missing, you've got all the info you need on hand for the police and your insurance company. As well as keeping track of your tools in case they're nicked, you can also record things such as warranty expiry dates and tag and testing due dates, too. You can use the app for free for up to five tools to test it out, while an annual fee of \$28 allows you to log as many tools as you need.



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# SPOTLIGHT ON CRIME

THERE MAY NOT BE MUCH NEW ABOUT THE CONCEPT OF SECURITY LIGHTING, BUT IN PRACTICE, INNOVATION IS EVERYWHERE YOU LOOK.

**Y**ou're lying in bed, and the security light goes on outside your window. Do you:

- Activate your panic room deadbolts and wait for the police.

- Peer outside and wonder if you should investigate.

- Roll over and go back to sleep. Bloody possums.

If you answered b or c, that's evidence that these days most of us are pretty familiar with — even blasé about — security lighting. Whether it's a full-blown smart system or a solar-powered DIY job stuck to your guttering, it's an integral part of modern life. But it wasn't always that way.



## AN ULTRASONIC PAST

The first motion detector used for home security purposes was patented in 1953 by US inventor Samuel Bagno. His 'ultrasonic alarm' enlisted the Doppler effect, reacting to the difference in the frequency of sound waves of a moving object. Today's motion sensors work on some of the same basic principles only, well, better.

"PIR sensors [passive infrared sensors], often referred to as motion sensors, work on detecting heat and movement in the surrounding environment," says Jake Short, Technical Support Officer at GSM Electrical.

"You can adjust the light level (lux), sensitivity, time duration and detection zone — usually up to 18 metres. A multi-cell Fresnel lens is used to divide the sensor's basic detection range into multiple segments or zones. When the sensor detects movement between the zones

— especially people, animals and cars — it activates connected devices such as lighting.

"Recently, we've been seeing motion sensors fitted with a built-in manual override feature. This feature requires the sensor to be wired to a light switch. By turning the light switch off and back on within three seconds, the light can be turned on and won't time out. It's a feature that saves the homeowner the expense of installing a three-position switch to achieve the same results."

## GET SMART

Of course, if you want to save yourself the hassle of using switches altogether, you can hook your security lights up to an automated smart home solution that lets you control almost everything in your home from an app.

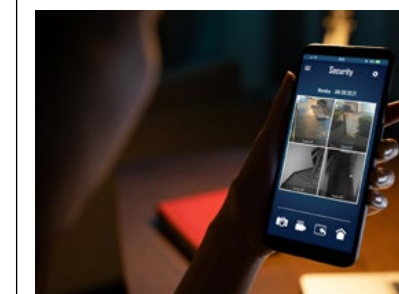
(And no, it's not just something for new builds. The best systems can be retrofitted into any home that has 240V wiring with a neutral in the walls.)

Tim Fant, Product Manager — Comfort and Energy Management at Schneider Electric, explains.

"The Wiser system incorporates a range of sensors and smart switches that can be wired to control lighting used for security purposes. Wiser is a scalable system that allows homeowners to start small with simple Bluetooth point-to-point control using timers or schedules, or they can scale up to a Zigbee mesh system to control their whole home from anywhere."

We may automatically think of outside lighting when we consider security, but of course, having lights on inside the home is the biggest signal that someone is in residence and therefore not an easy target for crime.

"Wiser can be easily programmed to



automatically turn inside or outside lights on and off at certain times of the day, to give the impression someone is at home while they're away," says Fant.

"When a Wiser Hub is connected to the Wiser system and the home internet, lighting can be controlled from Wiser via the Schneider Electric app while the user is away from the home."

## IN POSITION

No matter how smart your home, you'll need to wire up your sensors to take maximum advantage of all the supporting technology. Think about your entry and exit points and note any dark corners, so you can create a pathway of light for safety and security.

"We recommend an installation height of 2.5 metres to optimise the field of detection," says Short. The base needs to be installed on a level surface ensuring that water and dust cannot gain ingress."

Although many outdoor sensors carry an IP66 weather-protected rating, be mindful that constant exposure to harsh UV sunlight can reduce the life of motion sensors.



The gasket material between the lens and fascia can perish prematurely in these conditions, so if the installation permits, it's preferable to position sensors under an eave.

And what about those possums? Will they continue to set off the sensors in the dead of night?

"Yes. Cats and other animals, people, cars, occasionally tree branches swaying in the breeze and heat generated by light globes can set off motion sensors," says Short. "You can adjust the sensitivity of the sensor, but a reduction in sensitivity will obviously affect the detection zone." ■

# HOW BRIGHT THE LIGHT?

WANT TO ILLUMINATE FOR SECURITY WITHOUT FLOODING THE NEIGHBOURHOOD? BE ENLIGHTENED BY THIS Q&A WITH JOHN PAPADATOS, BUSINESS MANAGER AT REPELEC AUSTRALIA.

## Q What is the optimum lumens in outdoor security lighting?

**A** In a commercial or new residential installation, we typically need to achieve a minimum lux level to meet the relevant Australian standard, whereas in an existing residential installation, the amount of light required comes back to the end user's preference. They do however still need to meet AS4282:2019 (control of the obtrusive effects of outdoor lighting). The rule of thumb that we use is 1000 lumens for a small area, 2000 lumens for a mid-size area, and if it's a larger back yard, 4000 lumens.

## Q How do you go about minimising light pollution?

**A** As a lighting engineer, one of the biggest challenges is to maintain a good uniformity of light while keeping running costs and light pollution to a minimum. This can be achieved in various ways using motion sensors, dimmers and timers to adjust the levels to the required values. More recently, we have offered security lighting with stand-by light function sensors. This allows the light to work at 100% in its sensor mode at the pre-set run time. It then drops to a lower light level, still giving you some security light.

## Q What do you do if your neighbour's lights are disturbing you?

**A** Residents do have rights with respect to excessive light. Light pollution from neighbours is becoming an increasing problem in urban areas, not only affecting the health of humans but also that of flora and fauna. First, try speaking with your neighbour, as they may not be aware of the impact their lights are having. If that doesn't work, you can lodge a complaint via your local Environment Protection Authority (EPA). The EPA may investigate, issue warning letters or impose a fine.

## HOME VS BUSINESS

A security system is designed to protect the property, and the people and valuables inside it. That goes for home and the workplace. But that's pretty much where the similarities end.

► **RISK** Risk assessment for a house is relatively simple. The family probably has a routine, and the areas to target are easy to identify (think doors and windows). At a commercial property, things are more complicated. There will be lots of different people coming and going at various times of the day. There may be valuable stuff sitting around that is easy to see or find out about. If it's an industrial facility, there can also be safety issues. Areas to target may include storerooms, kitchen facilities, lifts, stairwells and parking. A commercial security system needs to do more than protect the perimeter — it is likely to be multi-layered, and part of a holistic security strategy.

► **REGULATION** Residential properties are generally not subject to certification and/or regular inspections of security equipment. Commercial properties, however, are required to undergo regular inspections based on building codes and any local or state regulations. Also, while some councils require planning permission for security cameras, individuals can't contravene the Privacy Act. An organisation that uses surveillance devices, however — such as security cameras or CCTV — is beholden to multiple regulations.

► **COST** Residential security systems and lighting generally have a much lower cost than a commercial system, where the initial outlay is higher. Energy saving is a big consideration in a commercial application as it will be a factor in the business profitability, and building a highly energy-efficient system can be very expensive initially.



## PRYING EYES

SECURITY CAMERAS ARE EVERYWHERE. CAN ELECTRICIANS GET INTO DEEP WATER IF YOU CAPTURE FOOTAGE YOU SHOULDN'T?

Whether you're walking along a busy street, sitting in a park or having a drink in the pub, it's more likely than not you're on camera — security camera, that is. In the last decade, the number of CCTV cameras in Australia has doubled to about 1 million. About 300,000 of those

are in NSW, with a recent report listing Sydney as the 15th-most surveilled city in the world. When it's your job to install security cameras, where can and can't you point these prying eyes? Are you legally responsible for anything dodgy they record?

### PUBLIC VERSUS PRIVATE

The rules governing security cameras differ from state to state, but the basic principles are similar. Put simply, you can install a surveillance device wherever you like, as long as it's on private land, explains Rick Sarre, an Emeritus Professor of Law and Criminal Justice at the University of South Australia. "If you're on public land, you can't. Full stop," he says. "You can't just wonder if a park has some [dodgy people] running through it at night and install a surveillance device, and later go back and retrieve it."

What of the footage collected? Here's where it gets a bit more complicated. "Let's say you've got footage of two people standing outside your property having a conversation," Prof Sarre says. "If you can't hear them, that's fine. If you're simply photographing things, that's fine. If you can hear them, it's now potentially an offence because they are not aware they are being taped."

### WHERE THE BLAME LIES

The very excellent news for electricians who are installing security cameras is the laws are rarely your problem because, says Prof Sarre, "The person who

is instructing you is the person who's responsible." "It's a bit like a so-called newspaper defence where if someone publishes an advertisement that contains a falsehood, the newspaper is not



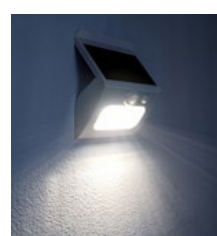
liable because they can't check every advertisement that comes to them in the 24-hour turnaround between lodging the ad and publishing it," he says. Prof Sarre says electricians are simply another person along the supply chain. "There's the person who designed the surveillance tool, who built the surveillance tool and who installed the surveillance tool for the person who has actually decided to employ it. "An electrician would have a complete defence by saying all they were doing was following the instructions of their principal." For non-legal types, that's your client.

## AT A GLANCE: THE PROS OF LIGHTING UP

Unless they have a secret ambition to tread the boards, no self-respecting crim wants to work in the spotlight. Security lighting is one of the best ways to deter villains from breaking into your home or workplace.

**2** It can save you a trip  
Illuminating your property or home will help people navigate their way in the dark, preventing the risk of them stumbling or falling over.

**3** It unites the neighbourhood  
Say you're away, or out, or asleep in bed — you can't see those interlopers scaling your fence, but your neighbours can. Again, too-hard basket for most crooks.



**4** It will wave goodbye to furry enemies  
Possums in the attic, rats up the drain pipes? Surprise lighting is useful for deterring four-legged intruders (although they may work out over time that it's worth the risk).

**5** It may increase the value of your property  
A decent security system is something many house hunters have on their wish lists, and the upfront investment will pay off when it comes time to sell.

**6** It looks awesome  
Let's not forget that lighting can create a beautiful outdoor space — a perfect place to relax with a cold drink at the end of the day.

## SECURITY FIRST



**TRADER Arctic Owl**, Outdoor infrared sensor

**CABAC Sunset Switch**



**REPELEC House Watch Twin 2 x 10W LED Spotlights with Sensor**



**EVOLT Atom AT9819 Slim Tri-CCT LED Floodlights**



**CLA LIGHTING SEC03S**, Surface mounted security lights with sensor



**SCHNEIDER ELECTRIC Clipsal Wiser Lithium Battery Smoke Alarm**



# DON'T MAKE IT EASY FOR CYBERCRIMIS

**OPTUS, MEDIBANK, THE SMITH FAMILY... WHO'S NEXT? WHILE A CYBERATTACK ON YOUR CONTRACTING BUSINESS MAY NOT MAKE GLOBAL HEADLINES, IT'D CERTAINLY CAUSE YOU AND YOUR CUSTOMERS A HUGE HEADACHE. KNOWLEDGE, AS THEY SAY, IS POWER.**

If cybercrime wasn't on your radar before, it certainly will be now. Between the Medibank and Optus breaches, many Australians have been affected, leaving both businesses facing the aftermath. While Medibank and Optus have the backing to hopefully survive, these incidents brought with them the stark realisation that every business – and consequently, every customer – is a potential victim of cybercrime. Cybercrimes today are a huge and ever-present threat for everyone around the world. Every seven minutes, the Australian Cyber Security Centre (ACSC) receives a report of a cyberattack (just think of the number that go unreported, too) and in the past year, there

were 76,000 cybercrime reports, an increase of approximately 12.6 per cent from the previous year. In some respects, however, it's easier to protect a small business than a large outfit like Optus. You've got fewer people, fewer ways in, and your data's less valuable. However, naturally, small businesses will have far less protection and cyber know-how than the bigger players. In reality, they're much easier targets. It's time to redress that balance. **MAKE NO MISTAKE: CYBERCRIMES ARE INCREASING AND EVOLVING** Okay, first things first. It's important we all know what we're talking about here. So, let's recap. A cybercrime either uses or targets computers

or other information communication technologies (ICTs) to carry out any criminal activities either for financial gain, to seek retribution, or for political reasons. These attacks can maliciously disable sophisticated computer networks, steal sensitive and private information, and initiate other criminal activities like cyberbullying, identity theft, email fraud, cyber extortion, and the sale of data and other illegal items.

As more people rely on internet-connected technologies and services, there is more opportunity for cybercriminals to carry out cybercrime activities using the anonymity of the internet.

Cybercrime is now big, big business, and is constantly evolving to counter advances in security systems, finding weaknesses to exploit and launch attacks on individuals, businesses, and the government.

Cybersecurity comprises protections based on people, processes, and technology. When one area is weak, that is what is targeted," says Mike Ouwerkerk, the founder of Web Safe Staff.

People, says Ouwerkerk, are often the weakest links and the primary targets for scams and cyberattacks because, largely, people are untrained in how to identify and deal with scams.

According to Ryan O'Kell, Head of Cyber Security (APAC) at Waterstons Australia, the sophistication of cybercrime has evolved drastically over the last decade.

"The biggest evolution has been in the methods adversaries are using to monetise their access," he explains.

"Ransomware crews have gone from just leaving a message saying, 'Pay us' to actually exfiltrating the data and saying, 'Pay us, or we release all of your company's information publicly.'"

Exhibit A: Medibank.

## WAKE UP! CYBERCRIME IS VERY, VERY REAL

The recent data breaches at Optus and Medibank collectively affected 19.7 million Australian customers.

In terms of wake-up calls, it rivals a combination of alarm clocks, a flock of roosters and a wandering band of pan-playing minstrels entering your room at 6am.

Cybercrime is a reality and is on the rise.

And you need to get your business as cyberattack-proof as possible. Otherwise, your business will grind – very quickly – to a standstill.

"A typical incident we respond to sees most staff sent home for the day, work comes to a halt, and third parties are informed that they've got a problem," explains O'Kell.

As businesses store more of their customers' data, they are increasingly at risk of cyberattacks.

"Work from home added new complexities around this, because now there are additional devices and networks outside of the control of IT, and these are often far less protected," adds Ouwerkerk.

In 2021, the estimated cost to the Australian economy was a staggering \$42 billion, according to the UNSW Institute for Cyber Security, while a 2022 study by IBM shows human errors account for 21 per cent of the breaches and IT failures result in two per cent of breaches responsible for data loss.

## TIME TO GET CYBER-FIT!

Small businesses make ideal targets for cybercriminals – without a full-time IT staff, small businesses are more vulnerable to data breaches and cyberattacks.

According to an Intel-sponsored survey, the average cost of a data breach for small businesses is \$100,000. Besides financial damages, lost customer trust and cost to the reputation of the business, some small businesses may face extensive breach fines and penalties, which can amount to thousands of dollars.

The responsibility of keeping data secure lies with the business, especially when storing their customer's information.

Business owners need to understand, identify, and guard against risks. O'Kell advocates proper planning to minimise

the cost and damages and suggests implementing simple security measures at the very least.

"Daily backups that are offline or immutable can be the difference between being back online tomorrow and losing months of data. A robust detection system can be the difference between finding an adversary in your network and ejecting them before damage is done, or losing time, money and your customers' trust."

## THE FUTURE OF CYBERSECURITY

"Looking towards the immediate future, it appears that breaches will continue to rise," says Ouwerkerk. "There's an alarming lack of preparedness around data breaches for many companies, and staff remain largely untrained in spotting and dealing with scams."

While more individuals are noticing data breaches of their personal information and learning what to do about them, businesses are falling behind.

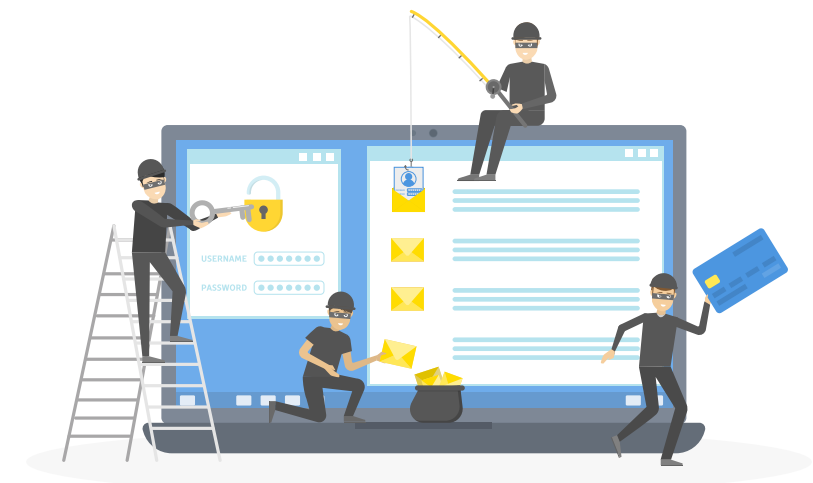
Presumably, they will take cybersecurity more seriously with the introduction of new penalties around data breaches, creating fresh challenges.

"As cybersecurity expertise can be hard to come by, and a flood of demand will mean a lack of service or potentially substandard service as less capable vendors attempt to cater for the high demand," Ouwerkerk explains.

"Unfortunately, with this demand, it would be reasonable to expect the price of cybersecurity services to increase."

Like it or not, cybersecurity is a huge, huge threat – and as a business, it simply has to be taken seriously.

The warning shots have been fired. ■





**Human error** is mostly responsible for cybersecurity breaches. Your employees are your weakest link and cybercriminals target businesses where they are most vulnerable. This is a harsh reality that all businesses must contend with. As your employees have access to business data and tools, cybersecurity training is necessary for them. Here are five tips and best practices to train employees in cybersecurity...

**INVEST IN CYBERSECURITY TRAINING**

Empower employees with tools and strategies in cybersecurity best practices through a robust training program spread over a few months and offered as a tiered program rather than a one-time training session. This will offer the best opportunity for employees to absorb all the information. To keep employees

updated, deliver cybersecurity training to employees every four to six months.

**DRIVE AWARENESS OF CYBERSECURITY AND PRIVACY**

Share cybersecurity news regularly with employees through newsletters or meetings. Discuss the consequences of cyberattacks and offer tips and training on how employees can prevent them at the workplace. Emphasise the role of privacy and security in your business when onboarding new employees and through regular sessions and knowledge checks.

**CREATE A SECURITY CHECKLIST**

A cybersecurity checklist is an important tool that helps employees follow security protocols and drives security training through regular practice. The checklist can include detailed

instructions and should be updated regularly to include the latest security practices.

**TEACH ABOUT IDENTIFYING SUSPICIOUS ACTIVITIES**

Train employees to be aware and spot suspicious activities that can be precursors to a cyberattack, such as strange pop-ups, the appearance of new programs and loss of



mouse control. Cybercriminals are proficient in using fraudulent email addresses and domains, so training employees in recognising these scams can help avoid data breaches. Emphasise – and re-emphasise – that you shouldn't click on a link in an email from anything that looks remotely suspicious. Check it, and find it on Google yourself. And never call a number given on an email – always call a publicly listed number instead.

**PASSWORD SECURITY TRAINING**

Encourage employees to follow password best practices and use password management tools. With some employees working from home, it is important to remind them about things like password protection and not to get complacent about cybersecurity.

After all, it only takes one slip. ■



Even with the best security measures, businesses may fall victim to cybercrime. By taking the right steps after a data breach, businesses can minimise the damage. Typically, you would have a detailed Data Breach Response Plan in place for such eventualities. "This means you have a structured

way to discover breaches, contain them, recover from them, assess the impact, notify impacted parties, and then review and improve," explains Mike Ouwerkerk, the founder of Web Safe Staff. If your business has been breached, take these six actionable steps to respond:

**1 Identify the source and extent of the breach**

Determine where the breach has taken place, track what files have been accessed and what actions cybercriminals have taken.

**2 Alert professionals and address the breach**

Call on your IT staff to manage cyberattacks like data breaches and to fix vulnerabilities. "If you don't have the capability in-house, find an organisation that can help," says Ryan O'Kell, Head of Cyber Security (APAC) at Waterstons Australia. "Incident response can be sticky, but the sooner you respond, the better."

**3 Contain the breach**

The exact steps to contain the breach will be determined by the nature of the breach and your business type. Determine which servers or accounts have been compromised and contain the breach immediately so that other systems and servers are not affected. However, save a copy or disk image of affected servers for legal reasons.

**4 Notify those affected by the breach**

Identify those affected by the breach, such as customers, employees and third parties, and notify them. Communicate to customers how you plan to handle the breach and what actions are being taken.

**5 Notify appropriate authorities**

When there is a data breach of personal and credit information, you must notify the Office of the Australian Information Commissioner (OAIC). You should also report it to ATO's Client Identity Support Centre. Reach out to law enforcement authorities and notify your bank and insurer.

**6 Prepare for damage control and recovery**

Minimise the impact of the breach on your business and customers. Ensure you have a recovery plan in place and that data backups are working. "Backups must be protected from criminals and must be able to be restored in a timely fashion to get your business up and running again," adds Ouwerkerk.

**CANVA STILL THE BIGGEST AUSSIE DATA BREACH**

Back in May 2019, Australian design platform Canva became the country's first 'huge-scale' data breach, which globally impacted 139m people who were registered with a Canva account at the time. A hacker, named GnosticPlayers, stole usernames, names, email addresses, city and country data, and posted them on the dark web. More than three years on, however, and Canva's reputation has recovered, but – thankfully – the scale of that attack, in terms of the number of people impacted – hasn't yet been surpassed on these shores.

**KEEPING YOUR BUSINESS SAFE**

The best way for businesses to protect data and systems from cyberattacks is to be prepared. Here are five things you can do to improve cybersecurity.

**DATA BACKUP**

Back up your data regularly on a separate system – either to cloud storage or on portable devices. Ensure backups are regularly tested.

**EMPLOYEE TRAINING**

Train your employees to identify suspicious activities, use strong passphrases instead of passwords, and stay up to date with

cybersecurity processes and protocols. Spot testing them is always good, too – be practical about it, rather than theoretical.

**REGULAR UPDATES**

Update your systems, apps, and all software regularly, including your operating system, to avoid cybercriminals from exploiting any vulnerabilities in older versions.

**SECURE NETWORK AND DEVICES**

Protect our networks by installing firewalls that monitor and protect all incoming and outgoing data. Install security software on all

devices to protect from viruses, malware, and spyware and password-protect your Wi-Fi networks. Use network encryption when storing or sending data.

**OPEN EMAILS WITH CAUTION**

Spam and phishing emails can infect computers with viruses and malware. Turn on spam filters to reduce phishing emails and train employees not to open email attachments from unidentified sources.

**SECURE YOUR SMALL BUSINESS**

Cybersecurity measures are a must for any business, no matter how large or small. The repercussions of a data breach and cyberattack are multiple and can cost a business not only financial damages but also loss of reputation and credibility. For small businesses, this can even lead to closure. As cybercriminals get more innovative in their attacks, businesses need to stay at the forefront of cybersecurity and implement safeguards in their business.





MASTER ELECTRICIANS

# POSITION OF TRUST

FOR MANY CONTRACTORS, SECURITY EQUIPMENT IS A GROWING AREA OF BUSINESS – BUT WHAT PAPERWORK DO YOU NEED TO INSTALL SECURITY SYSTEMS? MASTER ELECTRICIANS SHARES ALL.

**Security equipment** is a growing electrical sector with increasingly complex technology behind it.

Any company that is relied on to install and maintain a security system is placed in a position of trust. In most Australian states and territories, to install some security equipment, you will need a security licence, though specific requirements differ between jurisdictions.

You will need a security licence if you install, repair, service or maintain any of the following items:

- Alarms
- Alarm monitoring system

- Audio and or visual recording system (CCTV)
  - Electro, electro-magnetic, or biometric, access control devices (door locks)
  - Motion, infrared detectors connected to an alarm.
- You don't need a licence to install:
- A motion sensor light that does not set off an alarm.
  - Basic electronic or mechanical locks installed during construction, repair, or renovation, or for a domestic property.
  - A basic video intercom that does not record.

## HOW DO THE DIFFERENT STATES AND TERRITORIES LICENSE SECURITY WORK?

All Australian states and territories require licensing for security installation work. This is specific to installing security systems and cameras and does not cover providing security guards or other security work.

There are two basic types of licences: one for the security installer – the employee licence, and one for the business – the firm licence. Licence names vary depending on each jurisdiction but generally, you can expect

these to be called a 'Security Installer' or 'Security Equipment' licence.

In most states or territories, no qualification is required. Each state or territory's police issues the licence if the applicant passes a criminal history check that demonstrates they are a fit and proper person. Licence renewal periods vary from a year to five years.

**Western Australian** licensing includes four classes of the Security Installer licence, and classification depends on the equipment you're installing.

Class 1: Safes, vaults, and locks.  
Class 2: Security alarms, CCTV for security purposes, electric fences.

Class 3: Security doors.  
Class 4: Locks.

In WA, an applicant needs to pass a training course relevant to

the equipment they are installing, or pass a practical test.

In **Queensland**, a sole trader can operate under their worker licence and a business licence isn't required. However, this changes if they employ someone. Queensland will not issue a business licence to a trust. These applications are managed by the Office of Fair Trading and each business is required to belong to an approved security industry association.

Queensland requires businesses to pass a three-yearly audit to ensure they are complying with a Security Code of Conduct. These audits are administered by approved security industry associations. MEA is an approved association and can help provide Master Electricians with a security audit. Queensland is currently the only state with this requirement.

In **New South Wales**, a Class 2C Security Equipment Specialist licence is required to sell, install, maintain, repair, service and provide advice in relation to security equipment. This includes electronic security equipment like CCTV cameras and alarm systems and barrier equipment like fencing and

security roller doors.

**Victorian** security installers must be registered with Victoria Police. Private security individual registration is required to install security equipment. The registration includes criminal history and character checks. This will be monitored throughout the three-year duration of the licence.

**South Australia's** Security Agent Licence is required for the installation of security systems, or advice around them. Sole traders, partners, and companies (including directors) can apply unless they have legal restrictions on their work or business, such as bankruptcy, financial receivership, or a suspended or disqualified trade licence.

## SHOULD I HAVE SPECIAL INSURANCE TO WORK IN SECURITY?

Security installations introduce unique challenges from an insurance perspective.

Professional Indemnity and Public Liability insurance is important for every business, but more specialised insurance may be needed for the security industry.

**Public Liability** insurance is designed to cover interactions

with members of the public. It aims to cover you and your business if a member of the public alleges you are legally liable for injury or for property damage.

**Professional Indemnity** insurance is designed to cover any business providing a professional service or any professional advice. It aims to ensure you and your business are covered if a client alleges your work or advice caused a financial loss.

For those working with security installations, cyber insurance could be of use. If there is any remote monitoring or remote assistance being performed as part of the security systems, cyber insurance could help cover any concerns.

A security business will want to look at a full cyber event coverage rather than a cyber extension under their liability insurance. This will help ensure their business is the first party covered, as well as any third parties that may be impacted by a breach through security networking.

You can ensure your business' equipment (for example, tools, stock, mobile phones) is covered, with general property insurance.

This can include any equipment that may be transported or owned by an external party – either stock on consignment or equipment already purchased by a customer – that the installer is responsible for transporting and/or is having transported by another party to the site.

Most liability covers will also include a sub-limit for 'Goods in Care, Custody or Control' or 'Goods in Physical or Legal Control'. As this is a sub-limit under the liability section, the cover will only apply in the event of loss or damage to this equipment due to your deemed negligence.

If you were transporting goods owned by someone else and were involved in a motor vehicle accident, this section of cover will only apply if you were at fault for the accident. You would need inland cargo insurance in place to adequately protect these goods. ■

If you are interested in moving into the security installation sector but have questions about licensing, insurance or more, phone Master Electricians on 1300 889 198.



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**WATTMASTER WATVS VOLT STICK**

RRP \$41.30

**THE LOWDOWN:** Pocket-sized non-contact voltage tester with light and sound indication. Fully-insulated body and safety hand guard. Beeping sound indicates live wire. CATIII 1000V AC. Sensitivity 230-1000V AC. Indicates within 4mm of wire carrying 230V AC.

**SIMPLY THE BEST**

I tend to lose or break volt sticks quite often, so being cheap to replace is a plus. If it was a little more robust I would pick this one every time. The simplicity of this voltstick is the winner - no buttons or switches, and the size is good.

**VERDICT: IT'S A WINNER!**  
**RATING: 8/10**



**BRIGHT CHOICE**

It's bright and easy to see. I liked the price, and that it has an IP rating. It didn't have a low voltage operation below 230V though, which would have been useful - as would an on/off switch a light, and making the buzzer a little louder.

**VERDICT: A CLOSE CONTENDER**  
**RATING: 8/10**

**JUST RIGHT**

This is a nice bright colour, and has IP rating, which is good, however it didn't have a switch to configure battery life. A light of the time would have been a bonus! It's not overly sensitive like the others, and it's at a good price point.

**VERDICT: MY CHOICE**  
**RATING: 7/10**



**SEW LVD-15 VOLT STICK**

RRP \$83.49

**THE LOWDOWN:** The SEW LVD-15 non-contact Voltage Detector is intended to check for AC voltage, signalling the user with an intermittent tone and a flashing LED when voltage from 50-1000V AC is present. The LVD-15 is used to detect voltage in outlets, lighting fixtures, circuit breakers, wires and cables, or to find a break in a wire. It also has a flashlight for convenience.

**LOUD AND BRIGHT**

I've never used this brand and was excited to try it out. Loud and bright indicators made it good to use in a noisy environment, however this didn't feel tough to me. It feels like it would shatter into pieces if I dropped it.

**VERDICT: NOT TOUGH ENOUGH**  
**RATING: 7/10**

**ON THE BULKY SIDE**

I liked the on/off button and the light function, however, I thought it was too sensitive and it felt bulky in the hand. The price is also a bit high, and I feel like the light function was too dull.

**VERDICT: NOT FOR ME**  
**RATING: 6/10**

**NOT IDEAL**

The grooved holding pads were good, but the blue light wasn't ideal, and the colour sensitivity was a bit high. It didn't have IP rating, and overall, there were better options at a cheaper price.

**VERDICT: PASS**  
**RATING: 6/10**



**KYORITSU KEW 5711 VOLT STICK**

RRP APPROX \$74.80

**THE LOWDOWN:** This volt stick has dual sensitivity: 'low' permits discrimination between phase and neutral, while 'high' enables the checking live cables in conduits or behind walls. It has a self-check function with audible warning for errors, and a low battery warning. The LED torch illuminates dark work spaces, and the unit has a CATIV 600V / CATIII 1000V safety rating.

**LIGHTWEIGHT CHOICE**

It's lightweight and small, and the little torch was handy. I didn't like the dual sensitivity. It also seemed oversensitive and was indicating while a long way away from cables. It also felt very breakable, and should feel tougher for the price.

**VERDICT: TOO SENSITIVE**  
**RATING: 7/10**

**LOTS TO LIKE**

I liked the light function, the high and low voltage operation, the buzzer, the temperature range, and the brand itself - although there was no IP rating. This could have been improved by having a power on/off button to save battery.

**VERDICT: MY FAVOURITE**  
**RATING: 9/10**



**TOO EASY TO LOSE**

The light on the tip is handy, it's also good to have a light on/off button to conserve battery life. I didn't like that it was so ultra sensitive - that is a big drawback. Being dark it would be easy to lose it in a roof cavity.

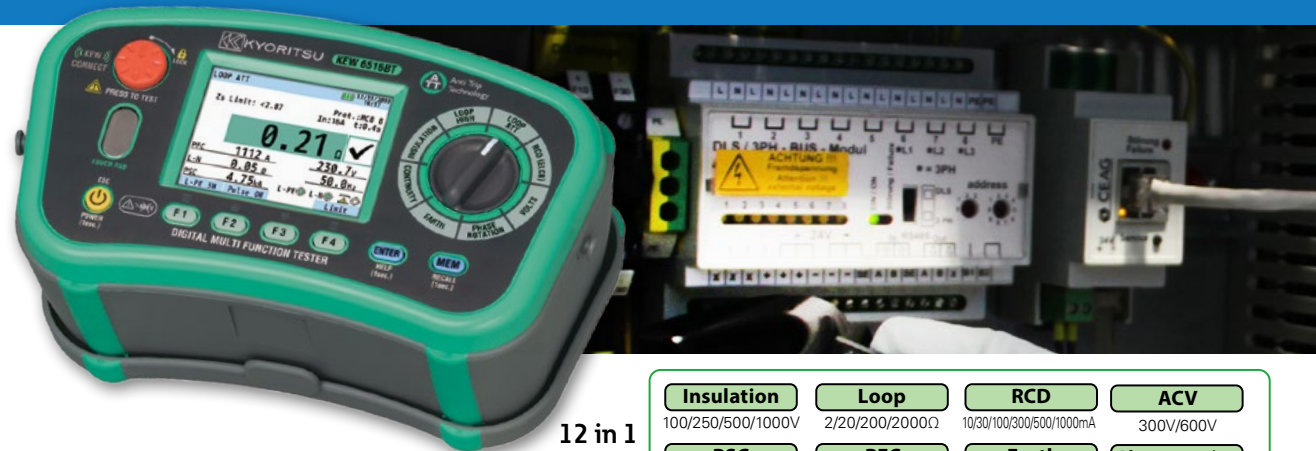
**VERDICT: LOTS OF DRAWBACKS**  
**RATING: 4/10**



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<b>AT9819/TRI/30</b> 30W Slim Power Adjustable Floodlight - Tri CCT - Black	12304	\$36.00 + \$3.60 GST
<b>AT9819/TRI/50</b> 50W Slim Floodlight - Tri CCT - Black	12306	\$52.67 + \$5.27 GST
<b>AT9819/TRI/SENS</b> AT9819 Flood Sensor Accessory - Black	12308	\$12.80 + \$1.28 GST



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INDUSTRIAL 150KG



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Ideal for use by tradespeople or DIYers. Factory fitted "V" rung allows the ladder to be safely positioned against poles and trees.

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**ON THE BIG SCREEN**  
MAKE A DATE WITH A NEW RELEASE



**KNOCK AT THE CABIN (2 FEBRUARY, CTC)**

Based on the 2018 book, *The Cabin at the End of the World*, *Knock at the Cabin*, written and directed by M. Night Shyamalan, is a psychological thriller starring Rupert Grint, Dave Bautista, and Jonathan Groff. It involves a family holidaying in a remote cabin, only to be taken hostage by strangers... in order to avert an apocalypse, they've got to make the ultimate sacrifice.

**CREED III (2 MARCH, CTC)**

The ninth instalment of the Rocky franchise hits the screens in March and is the first sequel not to feature Sly in his most famous role. In this movie, Donnie Creed comes face to face with his former friend and boxing prodigy Dame Anderson, who's back on the streets after a long jail term with a point to prove.



**SHAZAM, FURY OF THE GODS (16 MARCH, CTC)**

Based on the DC Comics character Shazam, *Fury of the Gods* is the sequel to the 2019 movie *Shazam!* and stars Zachary Levi in the lead role of Billy Batson. Billy and his siblings turn into superheroes by uttering 'shazam', and they've got to shazam it up to take on the enemy.



**SPORTS CALENDAR**

THE BIG EVENTS NOT TO MISS.

**12 FEBRUARY  
SUPER BOWL LVII**

Arguably the greatest sporting spectacle on the planet, the 57th Super Bowl takes place in Glendale, Arizona. Rihanna's due to do the halftime show, and if you're tuning in from Australia, you'll find it on Channel 7 and 7Mate. Hut, hut, off we go!

**2 MARCH  
NRL - 2023**

The new season kicks off with a new club in tow – the Redcliffe Dolphins – making their debut in the comp. Wayne Bennett's new charges will make intriguing viewing, with Jesse and Kenny Bromwich from the Storm, Edrick Lee and Anthony Milford from the Knights, and Robert Jennings from the Panthers lining up for the NRL's 17th club.

**16 MARCH  
AFL - 2023**

The other comp with a similarly shaped ball follows suit two weeks later, and Geelong will be looking to kick on from their Final win over the Swans. A new addition for this season is the interestingly-named 'Gather Round', with the whole comp decamping to South Australia in the middle of April.

**APPS**



**CHES - PLAY & LEARN**, App Store & Play, free with in-app purchases

This new 3D chess game enables you to play against people from all over the world, get a rating and move up the leaderboard. Which is all great in itself – however, the real drawcard here is the hundreds of chess lessons.



**7 MINUTE WORKOUT** by C25K, App Store & Play, free with in-app purchases

If you did just happen to consume an extra calorie or two over Christmas, and decided there was absolutely no point in cutting back on anything before Australia Day, then this new app will ease you back into a decent fitness routine.



**MACFAMILYTREE 10**, App Store & Play, \$54.99

There are a few genealogy sites knocking about, and this one is what the app developer describes as an 'immersive' experience. What that means, in reality, is up to you to decide, but it's good fun and easy to use and explore – which we guess enables you to immerse yourself in it.

## TUNE IN THIS MONTH'S MUST-LISTEN

### CRACKER ISLAND GORILLAZ, RELEASED FEBRUARY

Virtual band Gorillaz have always been interesting from a number of perspectives, but they've certainly got longevity – as their eighth album proves only too well. Some of the singles from the album have been previewed during their 2022 tour, and the whole thing, which is 11 tracks long, is another cracking release. The album's opener – which shares its title – features Thundercat, while the second track, Oil, features Stevie Nicks. Diverse.



## POWER AND COMFORT

### PREMIUM PACKAGE SPRUCES UP AN AUSSIE ICON.

The Toyota HiLux is the Bradman of local utes, outscoring and outselling its bitumen rivals for yonks. But as The Don found out, nothing lasts forever, and with that in mind, the Toyota boffins have been busy keeping the HiLux ahead of the pack.

The HiLux has always led the way in grunt and reliability. The top-end SR5 Premium Interior package dials up the comfort factor and gives Toyota's flagship a more plush feel. Heated leather seats work a treat on those

freezing mornings when you'd rather be snoring under the doona, and the smart door trims bring a touch of class. There's also an 8-inch screen multimedia system that allows you to listen to the latest AC/DC remaster while screening calls.

Of course, the HiLux SR5 still rocks all the hardcore essentials tradies have been salivating over for years. The 2.8-litre four-cylinder diesel detonates 150kW of force and 500 Nm of torque. While the 995kg

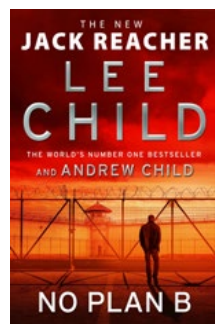
payload and 3500kg towing capacity ensure easy carriage for huge toolboxes and weekend warrior activities.

Toss in miserly 8.1L/100km fuel economy and you have a fair dinkum power hitter.

<b>SPECS:</b> HILUX SR5	<b>THIRST:</b> 8.1L/100KM
<b>DONK:</b> 2.8-LITRE FOUR-CYLINDER DIESEL	<b>WALLET:</b> \$64,430 WITH PREMIUM PACKAGE
<b>GRUNT:</b> 150KW/500 NM	



## READ UP ESCAPE WITH A BOOK



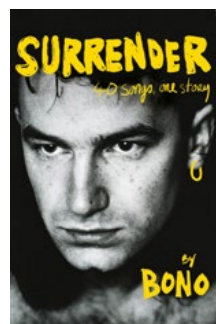
### NO PLAN B, LEE CHILD

Lee Child's epic series is still as good as ever, and this new book, the 27th in the series, is another classic. Reacher is one of two people who witnesses a woman get hit by a bus. The other witness swears it was suicide. Reacher saw a man in a grey hoodie push her. It is, of course, the tip of a huge iceberg. It wouldn't be Reacher if it wasn't.



### ONE: SIMPLE ONE-PAN WONDERS, JAMIE OLIVER

If your kitchen action needs a bit of fine-tuning, this book could prove the best investment you've ever made. This one-pan cookbook is packed full of recipes – which all need eight ingredients or fewer – and are guaranteed to delight whoever you're trying to impress. You'll never be short of eating inspiration again.



### SURRENDER: 40 SONGS, ONE STORY, BONO

Bono is synonymous with more than just U2 – he's played a major role in the fight against AIDS and extreme poverty for decades. He shares his story of growing up in Ireland in the 70s and losing his mother at 14 and becoming the lead singer of a band that would become one of the world's most influential.

## Game life

GET COMFY, SETTLE IN

### HOGWARTS LEGACY (M) ALL MAJOR PLATFORMS

Many of us will have gone through the same love it/mildly dislike/realise just how-bloody-good-it-is HP journey. This open-world action game enables you to experience Hogwarts in the 1800s, craft potions, cast spells, battle dark wizards and well, decide the fate of the entire wizarding world.



## THE CABLE GUY TECH GUIDE

### Thermoplastic Elastomer (TPE)

Thermoplastic elastomers (TPE), sometimes referred to as thermoplastic rubbers, are a class of polymers (usually a plastic and a rubber) which consist of materials with both thermoplastic (like PVC) and elastomeric (like rubber) properties.

Polymers can be divided into two categories, Thermoplastic and Thermoset. Thermoplastic polymers flow (becomes soft and change shape) at elevated temperatures and, once shaped, can be reheated and reshaped as many times as desired. These materials are relatively easy to use in manufacturing processes both by injection moulding or extrusion.

Thermoset polymers, once shaped, will no longer melt or flow on reheating. The polymerisation process results in strong network bonds (i.e. cross-linking) which are facilitated by the application of heat and pressure during shaping. These strong bonds keep the material from re-melting. When reheated, to normal cable temperatures, say 90°C, even higher temperatures, say 110°C, there will be no change of shape. Increasing temperature further, there can be charring and burning but no melting.

As such thermosetting materials cannot be recycled. Most elastomer materials used in cable manufacture are thermoset type and the cross-linking process is a critical structural factor which contributes to impart the material's high elastic properties.

TPE materials show advantages typical to both the elastomer materials and thermoplastic materials.

To qualify a polymer as a TPE, a material must have the following three essential characteristics:

1. The ability to be stretched to moderate elongations and, upon the removal of stress, return to something close to its original shape (so cable is easy to bend)
2. Can be processed as a melt at elevated temperature (so cable is easy to manufacture)
3. Absence of significant creep (so cable is dimensionally more stable)

TPE materials also require little or no compounding, with no need to add reinforcing agents, stabilizers or cure systems and hence can be processed on a simple plastic extrusion line.



They also have the advantage of being relatively cost effective when compared to the traditional commonly used elastomer materials. Nexans TPE sheathing material, as used in our flexibles range of cables, is tough, durable, resistant to abrasion, cuts, crush and flex cracking while still being smooth and highly flexible. The material withstands both hot and cold environments, sustaining the mechanical performance properties from -40°C to 90°C. Additionally, the material has excellent resistance against the effects of UV, water and a range of common oils, fuels, solvents, acids and alkaline chemicals. Cables sheathed with this material pass the flame propagation tests of AS/NZS 1660.5.6 and IEC 60332.1.




TO FIND OUT MORE  
[www.nexans.com.au](http://www.nexans.com.au)

# JOKES ANOTHER ROUND?



A man is sitting alone at the bar, staring at his untouched beer. A big truckie comes over, sits next to the man, and immediately skulls the man's drink. The man begins to cry, and the truckie's taken aback. "Sorry mate, it was just a joke - I was watching you staring at it for the past half hour and thought it'd give you a surprise. Don't cry, I'll buy you another." "You don't understand," says the man. "This is the worst day of my life."

"I got to work late as there'd been a crash on the freeway, so my boss fired me. I went back to my car, only to find it had been stolen, so had to walk all the way back home. When I got there, I found my wife in bed with the window cleaner - she says they're in love and she's leaving me, and then I found she's cleaned out our bank account. "And then, just as I'm working myself up to ending it all, you come along and drink my poison!"



A man goes to the doctor and describes his symptoms. "It's so embarrassing. Every time I see a woman on the street, I shout, 'What's new pussycat,' I keep calling my wife Delilah when her name's Susan, and whenever I'm out I long for the green, green grass of home." "Ah," says the doctor. "You've got Tom Jones syndrome." "Tom Jones syndrome? I've never heard of that. Is it common?" the man asks. "It's not unusual."

## TRIVIA TIME...

1. What is responsible for half of the deaths in the world?
2. What is the heatproof sleeve on the outside of a disposable coffee cup called?
3. Which European capital city has the most trees?
4. How many teeth do slugs have?
5. What was the first song played on the moon?

1. Mosquitoes 2. A zart 3. London 4. Approx 27,000 5. Fly Me To The Moon

## DID YOU KNOW...?

- Einstein uttered his last words in German. Unfortunately, he said them to a nurse who didn't speak German.
- Barry Manilow's hit I Write the Songs was written by Bruce Johnston.
- All the ants in the world weigh about the same as all the people.
- Cleopatra lived closer in time to the moon landing than to the building of the Great Pyramid.



■ Knock knock. Who's there? Interrupting cow. Interrup... MOO!

■ Knock knock. Who's there? Interrupting raven. Interrup... KA-CAAWW KA-CAAWW!

■ Knock know. Who's there? Control freak. Con... OK, now you say, 'Control freak who?'

■ What do you call a donkey with three legs? Wonky

■ A panda walks into a bar and says, "Can I get a ... beer?" The bartender asks, "Why the big pause?" "Because I'm a panda."


■ What's red and bad for your teeth? A brick.

■ Did you hear about the mathematician who's afraid of negative numbers? He'll stop at nothing to avoid them.

■ Why can't atoms be trusted? They make everything up.

■ What do you call a fake noodle? An impasta.

■ What did the pirate say when he turned 80? Aye matey.



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**Juliet IP55 Ceiling Fan**  
(JLT52WH pictured)  
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**Quinton Ceiling Fan**  
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## CLASSIC SHORT CIRCUIT

IN A BIT OF A FLAP.

When I was a third-year apprentice, I was at a house on the final day of a month-long job doing a complete rewire. My boss was at the switchboard testing all the circuits, and he kept finding huge faults on every circuit in the home. We started looking through the roof and checking everything was fitted off properly, and we couldn't find a single problem. After about three hours of looking for the fault (all of us were in the roof space looking around), we finally traced back all the wiring in the ceiling space, following the wires that were run neatly in the edge of the roof space. We came around a corner, and right in the corner of the roof where all the wires ran was a bird's nest. Next to the nest, about 20cm of insulation on every wire was stripped completely back to bare copper. The parrots had gone to town on every single wire.

This Short Circuit originally appeared in issue 131 of *Electrical Gems*, and was sent in by Luke Stewart, Mawson Lakes, SA.

## 4 WAYS TO SHARE AND WIN BIG!

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### 2. SHORT CIRCUITS

Something happened on the job that made you laugh or do a double-take? Send in your stories about strange or funny things that happened in the working week for the Short Circuits section. Hit us up with your best stories!



### 3. SHARE YOUR TIPS

Have you discovered a great way to get around a problem, save yourself some cash or get the job done in half the time? Are you prepared to share the love with your peers? We'd like to hear your bright ideas and bring them to the world.



### 4. NOMINATE A GOOD 'UN!

Does someone you know, or someone you work with deserve some public praise? Don't be shy. Give big props to a mate!



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## 03 APPLE AIRTAG

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## 04 GOOGLE PIXEL 7 5G

Google hits another home run with the latest version of its Pixel series. It will let you take industry-leading photos and videos with its advanced camera, features incredible graphics and is designed to smoothly operate games and apps. Plus, you can make calls. **\$999, jbhifi.com.au.**

## 05 DJI MINI 3 PRO DRONE

Drones continue to remain super popular and the DJI Mini 3 Pro ticks all the boxes. Weighing just 249g, extremely portable and featuring upgraded sensors, it will fly for up to 34 minutes at a range of 12km, taking great aerial snaps and videos with its 12.1 MP camera, before returning to fit in your pocket. **\$1299, jbhifi.com.au.**

## 06 SAMSUNG GALAXY WATCH5 PRO

Thanks to its built-in GPS, tough titanium case and ability to measure health data, this watch is designed for adventure and tough enough to join you running, hiking and heading off the beaten track. It's also got your back during downtime: it is the first watch series to have a snore detection function, and it tracks your sleep quality. **\$799, jbhifi.com.au.**



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**1981**



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Olex Cables  
**1973**



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Olympic Cables  
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