Reverse WiFi

HiFi PreAmps

Spicy Pillows

And More

WIA Affiliated Club

Cover photo,. Niagara power station talk at the 18/07/2024 meeting.
(If you have any good photos, please send them in)

Contents.

_____

Event Queue

August:

16th	8:00	General Meeting	
17-18th		Remembrance Day Contest	(wia.org.au)
25-26th		A.L.A.R.A. Contest	(wia.org.au)

September:

| 6th | 7:30 | Prac night |
| 20th. | 8:00 | General Meeting |

Club run events are only possible with the involvement of ALL members.
Without volunteers to coordinate and participate in club events the club will fail to prosper

---

President's Report June 2024

Greetings All

This month has gone by extremely quickly with work and ongoing project keeping me extremely busy.

I would firstly like to welcome the new members to GGREC

Anthony VK3AGM

Daryl VK3HBP

Phil VK3VB

Graham VK3KCS

Wednesday 10am coffee mornings at the Shack have been great, with many members turning up for coffee, chat and various different activities.

On the 20th July we held our Midyear lunch at the Railway Hotel in Pakenham. We had an excellent turn out and some very positive feedback, everyone had a great catch up and a great feed. Thanks to all who attended.

At our last Informal GM Bruce VK3BRW gave an outstanding presentation on the Niagara Parks Hydroelectric Power Generation Plant which was well received.
https://www.niagaraparks.com/visit/attractions/niagara-parks-power-station

At our last Prac night Mike VK3TDK gave an amazing presentation with his Geochron and all its amazing features. https://www.geochron.com/

Our project of re-establishing the IRLP/ECHO link node to our VK3RGW Club Repeater is coming along nicely, with anticipation from some members that cant access the repeater.

We are currently planning our next fund raiser, Bunning Sausage Sizzle which is essential for our Club to keep membership fees at current level. I urge you all too please support your Club and lend a hand.

In the coming future I will be planning our next Field Day, possibly at the same location in Cranbourne South where we are always welcome, any help with organizing this would be appreciated and any other portable activate suggestions please feel free to contact the committee.

Fred VK3FWR

President GGREC

From The Editor

Spicy Pillows

This month I got a bit of a surprise, on my bedside table was this iPod Nano, it used to be hanging out of my bedside clock, originally to play music – however as the clocks speakers were so bad I had long given up on that idea. (iPhone dock clock, being an old Chrissy present from way back)

When I picked up the iPod, the front seemed a little curved, rather than flat, 'Oh Poo' was my first though, forget about having a shower and going to bed, this thing needs sorting out NOW. For those unfamiliar, 'Spicy Pillow' is the name that has been given to Lithium Ion batteries that have blown up like a balloon and are extremely close to catastrophic failure.

Several years ago there was a spate of Android phone fires, something to do with a slightly too small battery recess?, anyway the batteries swelled up and burst into flames, not the sort of thing you need to happen in your pocket, although that pales into insignificance when compared to a phone in a plane way up there, half way across an ocean....

Anyway the last thing I wanted was this thing to go up in the middle of the night whilst I was asleep – then again, maybe worse when I'm out and not there to do anything about it.

Whilst I could have just put the iPod in a safe place, I decided to pop the back off and remove the battery. Unfortunately the iPod is now dead – there was three wires going to the battery so more complicated than I hoped, no just cut it free and run the iPod off a dock. Maybe the extra wire is a charging lead, and connecting say the red and white might bring it back????

That clock is a dreadful timekeeper, it relies on an iPhone for accurate time. A compatible iPhone – with a 30pin socket, I don't have, however the iPod is quite good at the task, so I was about to put it back in when I made the 'Spicy Pillow' discovery. Otherwise I have to give the clock a nudge every few weeks as it constantly loses time. In days gone by, clocks used the 50Hz mains as a reference, and never needed touching, however this piece of junk runs off a 5V DC plug pack, and as such has no external reference – not good. Unfortunately these days not many clocks exist on retailers' shelves – the 'young ones' just prop a phone up next to their heads as night – something I regard as a bad idea, mostly I prefer mine turned off at bed time.

So what to do with the battery?, put it in the bin and risk a bin fire?, drop it into one of those phone recycle bins – same issue. Is there a safe method?

There are a few recycling centres that cater for these batteries, however taking a trip to one of these with this puny battery.... Give is a rest. Same goes for leaving it around until I have enough batteries to make it worthwhile – not a good idea.

Maybe I'll force the issue 'out the back' with a none-approved technique.
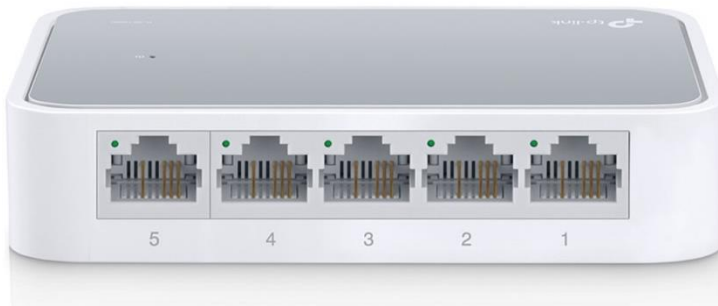
Paul VK3TGX

Reverse WiFi

Everyone loves their WiFi, or wireless in general, after all isn't that the essence of our club, the good old 'wireless'

However there are situations where this is kind of hard, as in the land of computers that don't have WiFi built in. The same goes for some TV's and games consoles, although to a lesser extent. With newer equipment with USB ports, a USB WiFi adapter is often a viable solution, however if your into retro gear with no USB, or you have several pieces on a table all wanting access, a pile of USB solutions can quickly get expensive. (and out of lan cable reach)

Now I know there are wireless routers out there that can do this, they are a rare breed indeed, I have several routers here and none support it. However I did discover that TP-Link sell some lower end WiFi access points that have three modes of operation, 'Access point', the normal thing you see, 'Repeater', again quite common, and 'Client', the one I'm after.

I bought this TP-Link TL-WA801 (above) from Centrecom for just $29. Whilst it only has one Ethernet port, that can be easily fixed with a cheap switch/hub. In my case with retro (old junk) I don't need gigabit speeds so an old 10/100 switch works just fine for retro, the sort found thrown out during council hard rubbish days, or grab one from Centrecom for $19, and you'll also get gigabit for the price. Although if your into retro, be sure and make sure the switch can handle lower speeds, some old kit only runs at 10Mb, or save more and get this 10/100 for just $14.

Setup would have been a lot smoother if I just had my main router, however nothings that simple here, I have another wireless router in my network acting as an access point. I had turned off its DHCP server etc., however the WA801 saw it before my main Telstra box and got its knickers in a knot and configured itself in a way that basically killed my home network. It saw that this extra router had its DHCP server turned off, so it promptly turned its own on. Two DHCP servers on one network is never a good idea, especially in this case as it started handing out IP setups that knew nothing about where my broadband NBN feed was coming from, so anything turned on after would have no internet access – not good. I'd hate to see how it would go if I also had the network leg out to my radio shack switched on at the same time, as that also contains another old router setup as an access point.....

However with all this turned off (temporarily) it did come up with an almost perfect config. I wrote this all down, made a slight tweak to allow for my kitchen router/access point, then wrote it in as a manual config, no more auto for me. Although most will not have these issues, that's the price I pay for being a cheapskate and reusing old junk routers.

Actually I had a similar issue at church, during the Covid lockdown we needed more WiFi, so our priest went to a local shop and bought a you-buet router with four antenna's – it promptly had the church network tied up in knots, or we had double NAT and nobody could print... It all depended which port we plugged into, 'Wan' or 'Lan'. So I got into it and configured it up the same as my extra routers at home, however one day it got confused, did a partial factory default/reset, and promptly screwed up every second computer in the place. Boy did that have me scratching my head for a while. (It had run for a few weeks with no issues)

With a few more whinges about no printer access, and me losing all trust in that box, I had a yak to our priest and got the go ahead to revisit Centrecom and buy another WA801 and set it up as an access point. It's not the fastest thing in town, no 5 gigahertz, and no WiFi 6E, the latest standard, however with the amount of usage it's going to see, no problems for now.

The '801 is rated at 300 Mbps, however running ookla speedtest on my old iPhone it did not pass 30Mb, often sitting at 25Mb, however that could be my old iPhones fault. It covered most of the church, including a side chapel, maybe a side effect of it being 2.4GHz only, whereas the previous router had 5GHz, however that could have been a downside as my phone did not swap off the 5GHz to the 2.4 and just lost the link – so yeah, not the routers fault, but this is the sort of carryon one often has to live with these days.

Only extended use will tell if it was a good choice for church. There is a TP-Link TL-WA1801 for $99 that does offer dual band gigabit and all that more modern stuff, bar 'WiFi 6', so that is probably a better choice for general use. If we (church) get any data hogs whinging about slow speeds then maybe I'll swap out the '801 for an '1801, however our church NBN feed is only 100Mb with a 29ms ping, so no a great improvements can be achieved by access point swaps.

For me, for now, as a client only device, it's good enough for my personal uses at home – Heck it'll probably spend most of its life in my goodies go box as I don't actually need it for my day to day playing's, it's just one of those things that's been on my list of 'nice to have' boxes for ages, and at $29 an easy buy. I've done heaps of Google searches looking for this function, glad to finally have one.

One thing I've learned, if you see something that's kind of nice but you don't directly need it now, buy it anyway, because tomorrow it may just not be available anymore.

I had a radio friend who on buying a new radio, would promptly go out and buy all the accessories for it as sure enough, next year when you need an 'XYZ' thingie for it, it won't be available anymore.

Paul VK3TGX

Limited Space Radio

 A stack of radios for Chris VK3VKK in a limited space environment there will be a short whip about 30-40 cm long that can handle 25watts that will go on the top of the aluminium case connected to the dual-band Zastone at the top of the stack.

The NXDN Kenwood will connect to the outdoor antenna and the FT450D HF rig will connect to a 5-band cobweb antenna

All comple except for an Anderson connector and then I will drop it off to Chris in the next couple of days and awaiting an order for a new Mic for the Zastone as the sheathing is going the way of the dodo

Mark "Pockets" Clohesy.

HiFi PreAmps

Audio preamps are not something most would come across, unless like me you have come across audio power amplifiers with basically no controls. Whilst one could drill some holes and fit some extra knobs, the usual approach is to use a preamp. The one above, a very rare and kind of unrepairable Yamaha C1 https://youtu.be/ZECpI3D3QWc due to the use of V-FET transistors that were reportedly custom made for this unit, and are now (as is ANY V-FET) long out of production.

At the other extreme is this Knobsound passive preamp, a concept that kind of stretches the definition of pre-amp. One explanation was 'pre-amp' means the box before the amplifier, as in 'pre'. It's just a pot in a box, anyone can make one of these, watch a review here https://youtu.be/pImUTtV_ilU they can be picked up for $40 on AliExpress.

Some swear by them, however most point out loss of sound quality al low volume settings, this mainly appears to be due to the relatively high output impedance of them, whereas a low impedance drive is usually suggested as best practice. For starters a high resistance into a shielded cable basically forms a R-C filter, lopping off the top end of the audio, as in muffled sound. So if you want to follow this line, keep the leads very short for hopefully a lower C.

If one looks on the internet there are many options out there, including many valved jobs, although these look kind of nice, I doubt their audio quality will be anything spectacular.

Nevertheless, one would look really nice in my setup, even if just for show and not actually connected, probably the best way to get the best experience from them.

For the bad side of adding valves watch https://youtu.be/5SO0vAl585A

For me the DIY route seems the best, forget the passive jobs, a few db of gain and a low output impedance is the way to go.

A while ago I was given a US Sony HiFi amp, US as in 120V that some idiot had fitted a local plug and shoved it into a standard 240V socket. You can guess what happened, one smoked standby transformer. As fixing and modifying for 240V was not worth the effort, I just stripped it. In there was a sub board with a high end pot and buffer/amplifier stage, just asking for re-use, so here it is temporarily mounted in an old video effects controller case, all I need now is a small power supply and an input selector
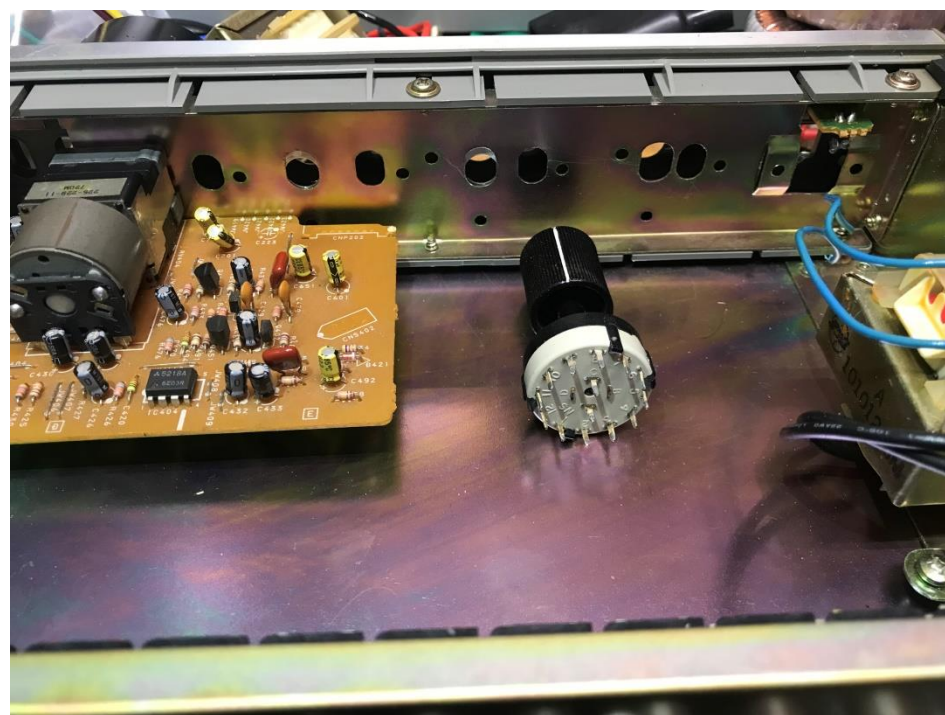
switch. I have a spare phono preamp kit, courtesy of Altronics, and a headphone amp module, however there is not any room for these, so they can wait for another day, not that I'm really into vinyl.

This case has an absolute truckload or RCA sockets on the back so mostly the build will just be wiring.
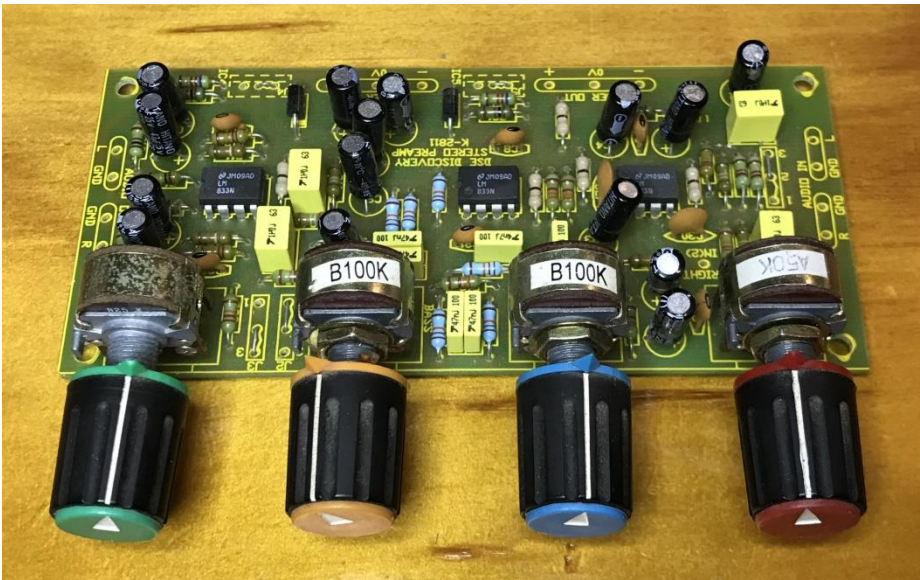
It's a pity these days multi-pole rotary switches are mostly either 2 pole 6 way, or 1 pole 12 way.

I do have some OAK multi bank rotaries, many banks but only 5 position. That was until I dropped one, boy are they fragile, even onto a carpeted floor.
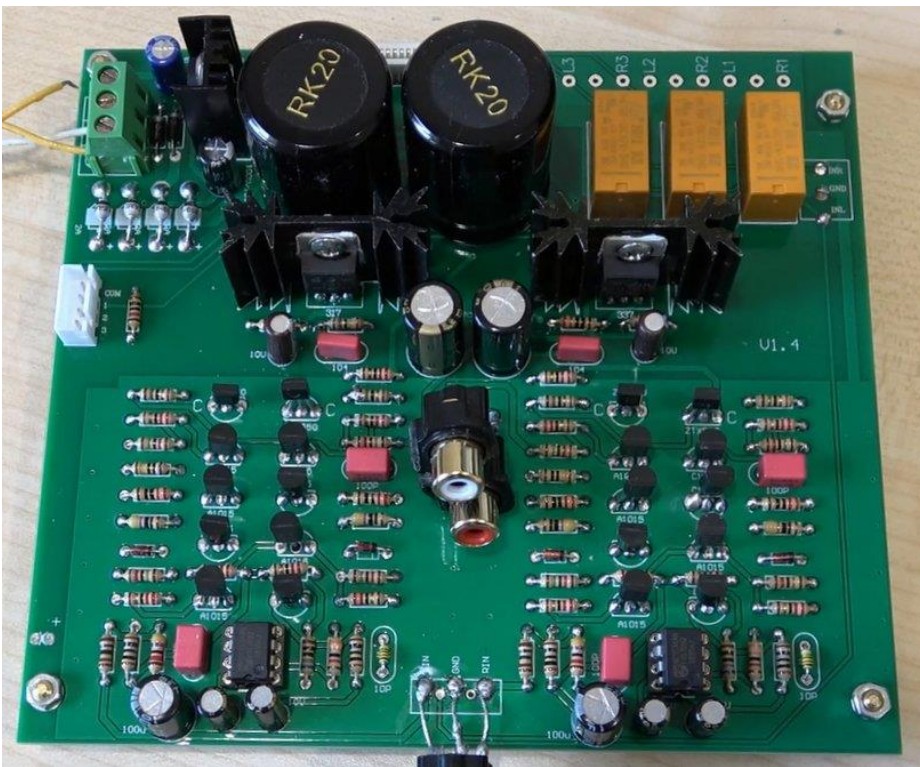
Oops....

For my next build I might try this old Dick Smith 'Discovery' board, all it needs is again an input selector switch and a small plus and minus 12V power supply.

(It can run single sided, but, yuk, no)

If your junk box does not have any handy bits etc, then there are MANY clone kits etc. on eBay & AliExpress, this being an Accuphase C3850 unit copy, however there are many others, I was rather surprised that they could offer these at all, the legal boys must be asleep.

Or how about a complete kit for a classic Quad 34.

This one was on eBay in the US for $216, so probably a tad expensive by the time it lands here.

Shame about the poor US AU exchange rates.

I hate playing double or nothing.

So why are there all these preamps out there, as you know most HiFi amps have this all built in. Well as you climb up the HiFi ladder towards the audiophile end of the world people start splitting their systems up, separate this and separate that. If your unhappy with a certain aspect of your system, then upgrade/change that part, kind of hard if you have an 'all in one', you kind of have to start from scratch – not that there are many really good top notch all in ones out there. Or should I say, were out there, as the audio market has really changed in later years with many people being quite happy with a mobile phone feeding a smart speaker. The source of their audio usually being a streaming service like Spotify.

All's well until you get the bug to upgrade your system. Years ago there were many shops bristling with gear, now almost nothing. I used to go to JB-HiFi, however they have turned into a general retail store these days offering everything but HiFi, Yes they have BlueTooth, but…

PerfectWave BHK M600 Amplifier

Anyway, I digress, as you move up the HiFi tree you start bumping into bigger and bigger amps, that have no place at the top of your HiFi stack/rack, they need to be at the bottom etc., with a nice preamp at the top for you to control it all.

At the top of the heap, so to speak are Monoblocks, as their name implies, they are mono, so you need two for a stereo system

A lot can be said about putting these Monoblock's near your speakers, so your speaker leads are the shortest they can be, then running line level (balanced) to them from a preamp.

There is a whole art in setting up a high end system, usually in a dedicated listening room, after all if you have the wherewithal to afford $59K each for the PS Audio, or $13K x2 for the McIntosh, that should not be a problem.

My audio aspirations ($$$$) are WAY lower, so hence DIY with what's in the junk box.

Paul VK3TGX

11

G`day

Just wanted to share how grateful we are for the support of life-member Kerry Clayton VK3KFC, who rocked up to the Grazy's Country performance at Maryborough Country music club on 4th September 2024 to support fellow club member Graham 'Grazy' Brennan VK3KCS. The Maryborough Country music club donated $1500 to Guitars for Veterans program that night and having a fellow HAM from GGREC there to support too was great.

Regards
Grazy & Aymes
Graham & Amy Brennan
0417 387 515
0417 050 879

Grazy's Country Music
www.grazymusic.com

_____

Noticed this in my recent German Amateur Radio Magazine CQ-DL, it shows our Lee enjoying himself in Dayton.

Maybe give it a small corner in the magazine

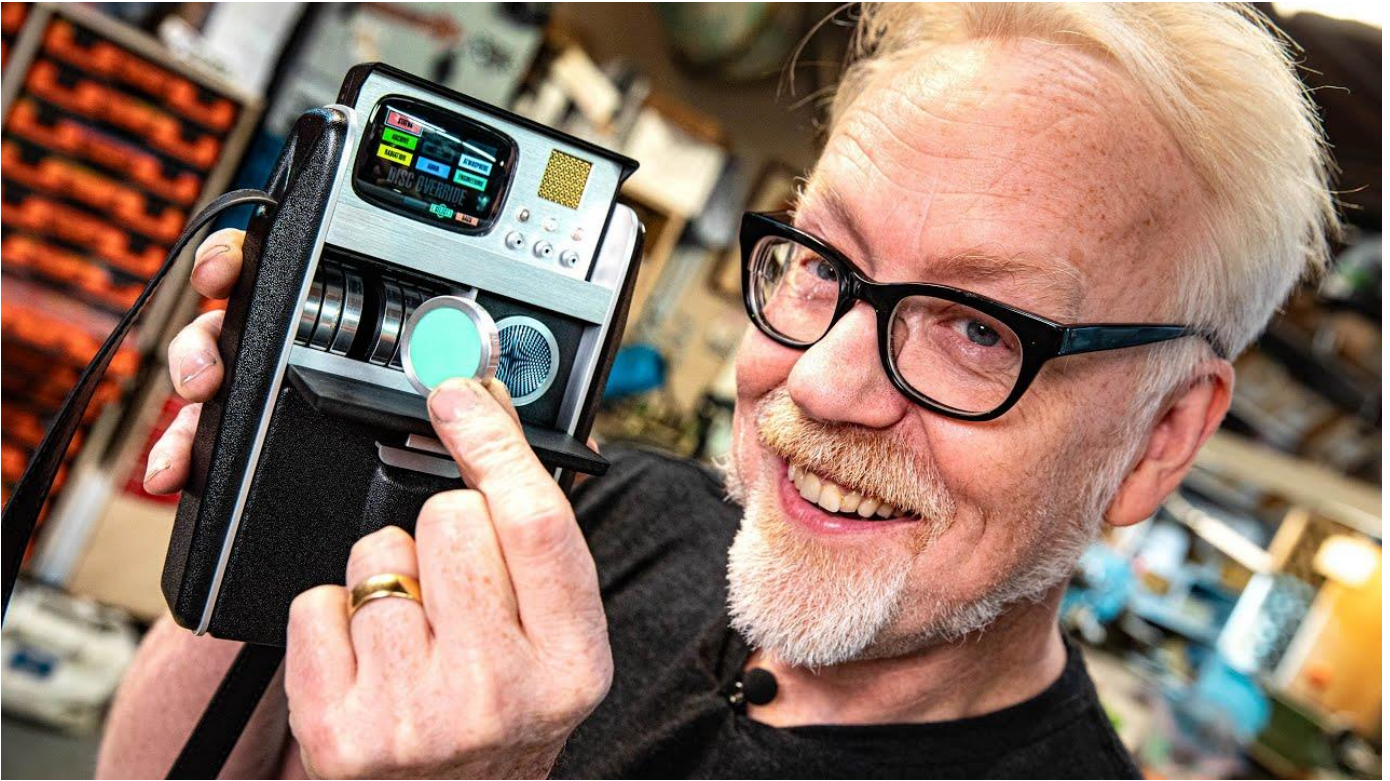Klaus Illhardt

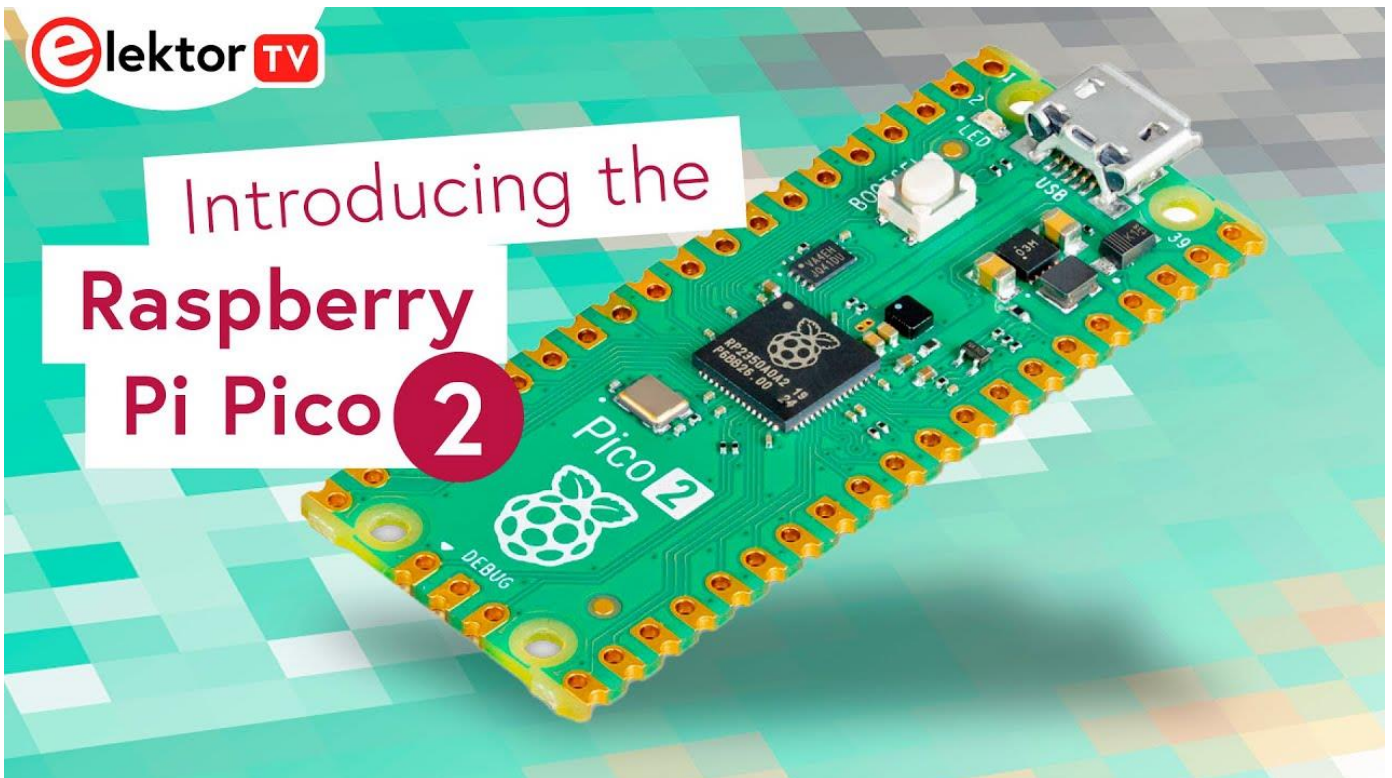# Prac Night 2/08/2024, Geochron Demo

Meeting 19/07/2024, Niagara Talk

Interesting YouTube Videos

Adam Savage in Awe of This Star Trek Tricorder!
https://youtu.be/yX_-yrJgpH4

Introducing the Raspberry Pi Pico 2
https://youtu.be/WVrPcdrcI2M

WIA Affiliated Club

The GGREC is an affiliated club of the WIA
https://www.wia.org.au/

We also give Thanks to

https://www.jaycar.com.au/

https://www.altronics.com.au/

For their generous support over the years

15

Club Information

Meetings 20:00hrs on third Friday of the month at the
Cranbourne Guide hall, Grant Street Cranbourne
Prac/Natter nights first Friday in the Peter Pavey Clubrooms Cranbourne 19:30hrs
Visitors are always welcome.

Office bearers

President	Fred Reid	VK3FWR	General 3		
Admin Sec	Klaus Illhardt	VK3IU	Web Master	Mark Clohesy	VK3PKT
Treasurer	Bruce Williams	VK3BRW	Magazine Editor	Paul Stubbs	VK3TGX
General 1	Leigh	VK3FACB	Property Officer	'committee'	
General 2	Ian Jackson	VK3BUF	Assoc. Secretary	Bruno Tonizzo	VK3BFT

Call in Frequencies, Beacons and Repeaters

The Club Station VK3BJA operates from the Cranbourne Clubrooms.
6m Repeater Cranbourne VK3RDD, In 52.575 Out 53.575 CTCSS none
70cm Repeater Cranbourne VK3RGW, In 431.425MHz Out 438.425MHz CTCSS 91.5Hz
VK3RGW Repeater supports Remote Internet access (IRLP), Node 6794 **offline**.
70cm Repeater Seaview VK3RWD, In 431.575MHz Out 438.575MHz CTCSS 91.5Hz
Simplex VHF - 145.450MHz FM, Simplex UHF - **TBA**
VK3RLP Beacons 1296.532MHz & 2403.532MHz **(currently offline)**

Membership Fee Schedule

Pensioner member rate $40.00, Extra family member $20.00
Standard member rate $50.00, Junior member rate $25.00
Fees can be paid by EFT to BSB 633000 - Account 146016746
• Always identify your EFT payments
• Membership fees are due by each April Annual General Meeting (AGM)

Magazine Articles to editor@ggrec.org.au Cut off, 10th of the month
All other Club correspondence to: secretary@ggrec.org.au
or via post : GGREC, 408 Old Sale Rd, Drouin West 3818
GGREC Web Site & Archive may be viewed at: www.ggrec.org.au
Website errors, contact web master: webmaster@ggrec.org.au
Facebook Page www.facebook.com/GippslandGate