



Founded 1979 Incorporation No A6677 P.O. Box 692, Shepparton 3632

February 2023 Newsletter

SADARC committee

President:- Rob Hose - VK3BLD
Secretary:- Arthur Duke - VK3AFD
Membership Sec:- Ian Saunders - VK3YYY
Webmaster:- Ray Gardiner - VK3YNV
Newsletter (editor):- Peter Simpson – VK3ASK
Technical Committee: Geoff VK3ZNA, Ray VK3YNV, Denys VK3ZYZ & Josh Gardiner – power to co-opt.
Vice-President:- Barrie Halliday - VK3KBY
Treasurer:- Ian Saunders – VK3YYY
Assistant Secretary:- Peter Rentsch - VK3AXI
Hamfest Co-ordinator:- Peter Rentsch - VK3AXI

To contact any member of the committee above, email committee@sadarc.org and specify who you wish to communicate with and the subject. Items for the newsletter newsletter@sadarc.org

Communications Manager (External Events): Darren Glasson (VK3HEN) – subject to confirmation.

Meetings the first Saturday of the month from **10 am** for informal chats and technical talks. A BBQ follows (a gold coin donation). Business meeting 1 pm (except January when no meeting occurs) at Flexible Learning Centre, 18 Channel Road (250 metres from Archer Street), Shepparton.

Variations in these times, days and location are normally notified in the preceding newsletter.

The next meeting will be held on Saturday March 4th, from 10am.

DISCLAIMER: - No guarantee is given as to the accuracy of information in this newsletter. E. & O.E.

WARNING: - There is a danger of electrocution or injury when working on electrical/radio gear or working at heights doing antenna work. You do so at your own risk. 25/08/2022

VK3RGV repeaters and transmitter operating frequencies Mt Wombat

53.725MHz (-1 MHz), **In Service** 146.65MHz (-600 kHz), **In Service**
438.2MHz (-7 MHz -D-Star), **In Service** 438.650MHz (-7 MHz 91.5 Hz tone), **In Service**
438.9MHz (-7 MHz - DMR), **In Service** 439.775MHz (-5 MHz), Now back in service, IRLP
(node #6990)

476.475 MHz (+750 kHz) CB Repeater WBT03 Channels 3- 33, **In Service**

VK3RDS, 438.7625 MHz (-7 MHz DMR) **Shepparton on test @ VK3YNV QTH**

The three following repeaters are not the clubs but are allied to the club in one way or another.

Mt Major VK3RDU, 146.850 MHz, 439.875MHz. Mt Bruno VK3RWC 147.325 MHz **(-1.6 MHz 123Hz)**

Access to most analogue repeaters is by sub-audible 123 Hz tone or noise/carrier mute (less sensitive).

Your TX offset is shown in brackets

Club informal on air get together, all welcome. Club call sign VK3SOL: -

Wednesday- 2mx repeater 146.65 MHz 8.00pm, 3.63 MHz SSB ± interference 8.30pm,
Sunday – 2 mx repeater 146.65 MHz 2 pm & 8 pm & The Vintage Radio Club – 2 mx repeater 11 am
A number of semi-private HF skeds take place either daily or weekly, locally or further afield.

Website – www.sadarc.org or www.sadarc.org.au Face book Page – Shepparton and District Amateur Radio Club Direct Link: <https://www.facebook.com/groups/481867453084459>

Note: Want to get your licence? SADARC has examination assessors, contact the secretary for details.

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- **Editors comment**
- **Secretary report, meeting minutes.**
- **Building battery banks using disposed e-cigarettes.**

Next Meeting

The next SADARC meeting will be held on Saturday March 4th commencing at 10am.

The plan for the meeting is as follows;

- 10am Continuation of Arduino course, conducted by Denys VK3ZYZ and Ray VK3YNV.
- 11am General discussion and catch up.
- 12pm BBQ Lunch, gold coin payment
- 1pm General meeting

A reminder that all membership payments are due by March 4th. The cost for membership is \$30.00

Memberships can be paid at our next meeting, or use the form, which was attached to the January newsletter.

Editor's Comments

Unfortunately, our President Rob VK3BLD, could not attend the February meeting as he is still having problems with his eye.

Hopefully things improve soon Rob.

A very familiar face took over the role as president for the day.

Thanks Peter VK3AXI, as usual Peter did a great job and was comfortable back in the chair for one meeting.

A large proportion of the meeting was spent discussing the best way to catalogue and sell off the large range of radio and electronic equipment and components, sadly left by Rodney Champness.

There were many suggestions and in the end a sub-committee has been nominated to document the gear and come up with suitable solutions.

There was also lengthy discussion regarding the future of our club and how we can attract new and hopefully involve some younger members to continue our passion. As you will read in the minutes, members have been appointed to come up with ways to promote and advertise our club and to expand into other facets of electronics.

Finding a permanent club room is a concern, which all members seem to share. Where we meet now works fine, but we really need a permanent home where we can setup and carry out projects, have test equipment readily available, plus room to install some antenna's.

Plenty of food for thought and no doubt discussions will continue over the next few months.

Our last meeting also started with the Arduino course. This time around, it was all about 7 segment displays and how to drive them.

Denys VK3ZYZ, very kindly had some PCB's made up which accommodate 2x 7 Segment displays, plus driver transistors and resistors. This board plugs directly into the Arduino uno and saves a considerable amount of jumper wiring. Thanks Denys and Ray for your efforts in carrying out this training and providing hardware, greatly appreciated by those who attend.

Until next time

Regards Peter VK3ASK

SADARC. Feb. 2023 Meeting Minutes.

Club Rooms: The Flexible Learning Centre, Shepparton

In Attendance: VK3KFM Kevin, VK3BFAllan, VK2JKN Jim, VK3GSR Geoff, VK3ZYZ Denys, VK3YNV Ray, VK3HEN Darren, VK3KUG Ray, VK3FALN Alan, VK3BPH Kevin, VK3TEX Les, VK3AXI Peter, VK3YYY Ian, VK3AFD Arthur, VK3OV Pat, VK3ASK Peter, Bill C. SWL., VK3EB Dallas, VK3JSD Stevo, VK3ZNA Geoff, VK3TJS Jacek,

Apologies: VK3KPL Paul, VK3BLD Robert, VK3ECH Rob.

Minutes of last Meeting: Read by Arthur VK3AFD, Moved by Arthur, Seconded by Jacek VK3TJS

All in favor.

Business arising: See General Business.

Inward Correspondence:

1. Paul VK3KPL Thankyou to club
2. QSL cards
3. VK3ZNA – To discuss -more permanent club room/ Publicity Officer /Clearing of Rodney's collection.

Outward Correspondence:

1 ACMA – Requesting VK3SOL License Renewal be addressed to the secretary.

Moved Arthur, VK3AFD Correspondence be accepted. Seconded Peter VK3ASK
All in favor.

Financial: Ian VK3YYY Reported income of \$190.26. Expenditure of \$680.40.

Moved by Ian VK3YYY, seconded by Geoff VK3GSR all in favor.

Technical:

Ray VK3YNV. All good – repeaters all operational.

Geoff, VK3ZNA to check progress on fusion.

Moved by Ray VK3YN, seconded by Les VK3TEX all in favor.

General Business:

Items raised by Geoff VK3ZNA

1.Rodneys collection.

Thanks to those who removed antennae. The remaining stock needs to be sorted an inventory taken and a means of disposal devised.

Several members indicated that they are willing to assist Geoff VK3ZNA and Kevin VK3BPH in this process.

VK3BPH moved that a number of members coordinated by Geoff VK3ZNA would sort and catalogue Rod's collection for disposal. Seconded Ian VK3YYY, all in favor.

Geoff VK3GSR has a large shed and is offering to store items at no cost. Perhaps until next Hamfest.

2.Publicity Officer.

Geoff suggested we appoint a Publicity Officer to promote our club and encourage new members. This person would need to be enthusiastic, good with words and have working knowledge of electronics.

There was discussion of ways to promote the club, a radio, 1FM community service announcement, in school exposure such as Joe and Julie do. station set up at events - BBQ.

Denys VK3ZYZ suggested that our present meeting format would be a deterrent to new members, the business meeting should be only for the committee and separate from the activities of the day.

Ray VK3YNV nominated Kevin VK3KFM for Publicity Officer, he accepted, and the motion was seconded by Peter VK3ASK all in favor. Stevo VK3JSD has offered his assistance.

3.Meeting Room.

Geoff has been speaking with Shepparton Council. They have a project to build a new Sports Stadium in the near future. The existing facility could become available for clubs. Ray VK3YNV suggested we have a look at it. Geoff to arrange.

Other Business

- Flood relief. In Oct.22 We had an offer to our members of flood relief from the Northeastern Victoria Amateur Radio Club. Ray VK3YNV requested that a thankyou be sent and an offer to return the favor if the need arose.
- Running Nets. Geoff VK3GSR to arrange a roster for Net Controllers
- Examiners. As Andy VK3AJA and Huntly VK3ZE are no longer Examiners, do we have any volunteers to fill this roll ?
- AGM. Arthur VK3AFD will continue working on change of rules.
- Newsletter input. Peter VK3ASK requesting articles etc. Peter also mentioned that the obituary for Rodney that he submitted to Silicon Chip magazine had as yet not been acknowledged.

Meeting Closed. 2:25 pm.

Battery Banks from old E-cigarettes.

Below an extremely interesting article submitted by Denys VK3ZYZ. In this article Denys gives detailed descriptions and how to salvage lithium batteries from old E-cigarettes, which in some cases were found lying around in the street.

These make great battery banks and also prevent an otherwise item of rubbish finishing up as land fill.

Over to Denys.

As mentioned on the 80M net, I have picked up some electronic cigarettes. These devices are the single use versions and can often be found tossed out (or collected from a friend who uses them).



The case is Aluminium with the ends pushed in. Grabbing the mouth piece with pliers, and applying a bit of brute force, it can be



pulled out. Then the "guts" can be slid out, or the other end removed and the pushed out.

Do not short the battery wires unless you want some fire! I did and it is pretty spectacular.

Cut the red from the battery, then the black. If you want, the pressure switch and heater can be salvaged too, along with any other parts you want. But I am just interested in the battery.

Battery Charger



Ray lent me his cell charger/tester so the capacity of the cells can be determined. These cells are quite good, with just under 1.5AH rating.

So far, I have about a dozen of these, so with a suitable battery management board, a

reasonable power supply can be built.

Here are the capacities tested...

867mAh (this cell was run over and flattened a bit)

1464mAh

1495mAh

1421mAh

1485mAh

next batch...

1444mAh

1474mAh

1559mAh

1400mAh

and the final batch I've tested...

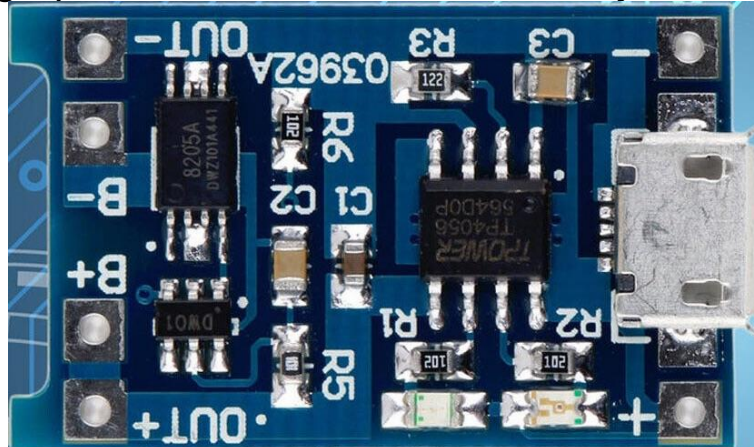
1489mAh

1443mAh

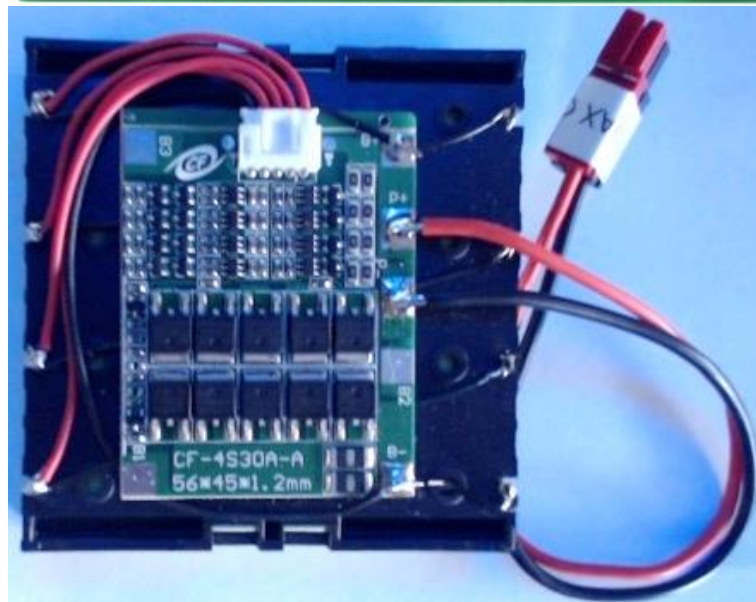
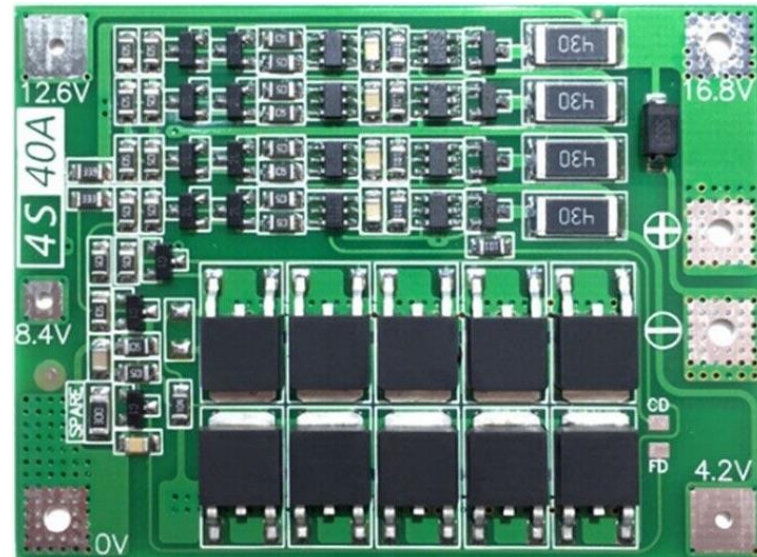
1459mAh

So, you can see they are pretty good capacities.

A single cell charger/protection board can be found on Ebay for around \$2.



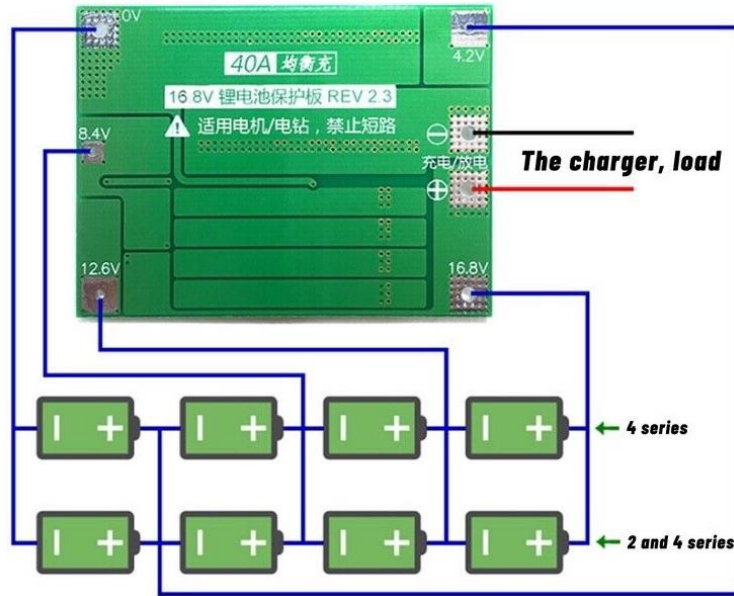
This version, with the B-, B+,OUT- and OUT+ has charge and discharge protection. There are some that are only chargers, but I would go with the boards that have both.



For multi cells in series, a board that also includes cell balancing is needed. This and other versions can be found for under \$15 from Ebay.

Versions of this board have an extra connection as shown above.

Each cell, or parallel set of cells, have connections to the controller to allow cell monitoring and balancing. Here is a typical example.



As you can see, these cells can be made into a pretty good battery bank for not very much outlay.

Just be sure you do run a charge controller of some sort unless you really like flames and smoke!

Denys VK3ZYZ

Editor.

Thanks Denys for a great article, one suggestion would be to always wear gloves when handling these devices. They would be very dirty and probably full of germs.