

Cowtown ARC
'Buildathon' 2023

Project #3:

QRP – ATU

HF 10w Antenna Tuning Unit



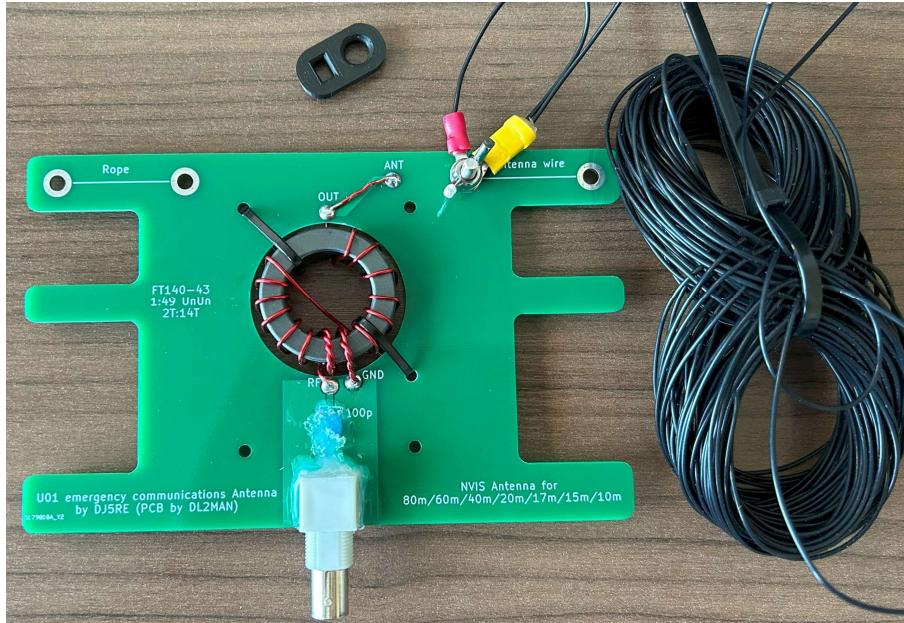
Contact : Richard cowntonadx@gmail.com



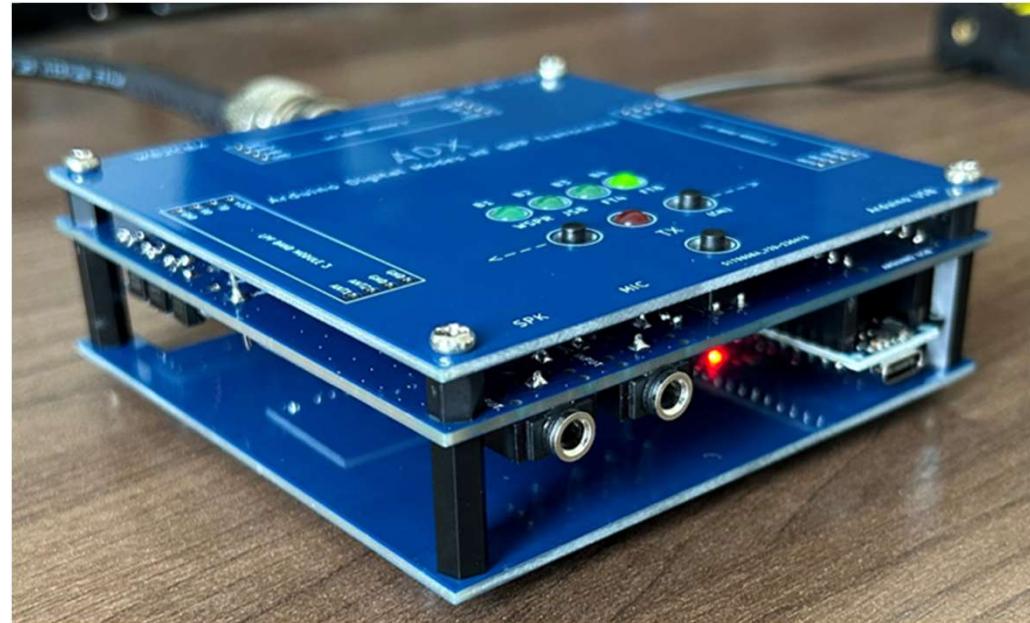
'Buildathon' 2023

The Buildathon set out to provide three practical kits this year:

- Project #1: EFHW Antenna.



Project #2: QRP Digital Mode HF Transceiver – the ADX

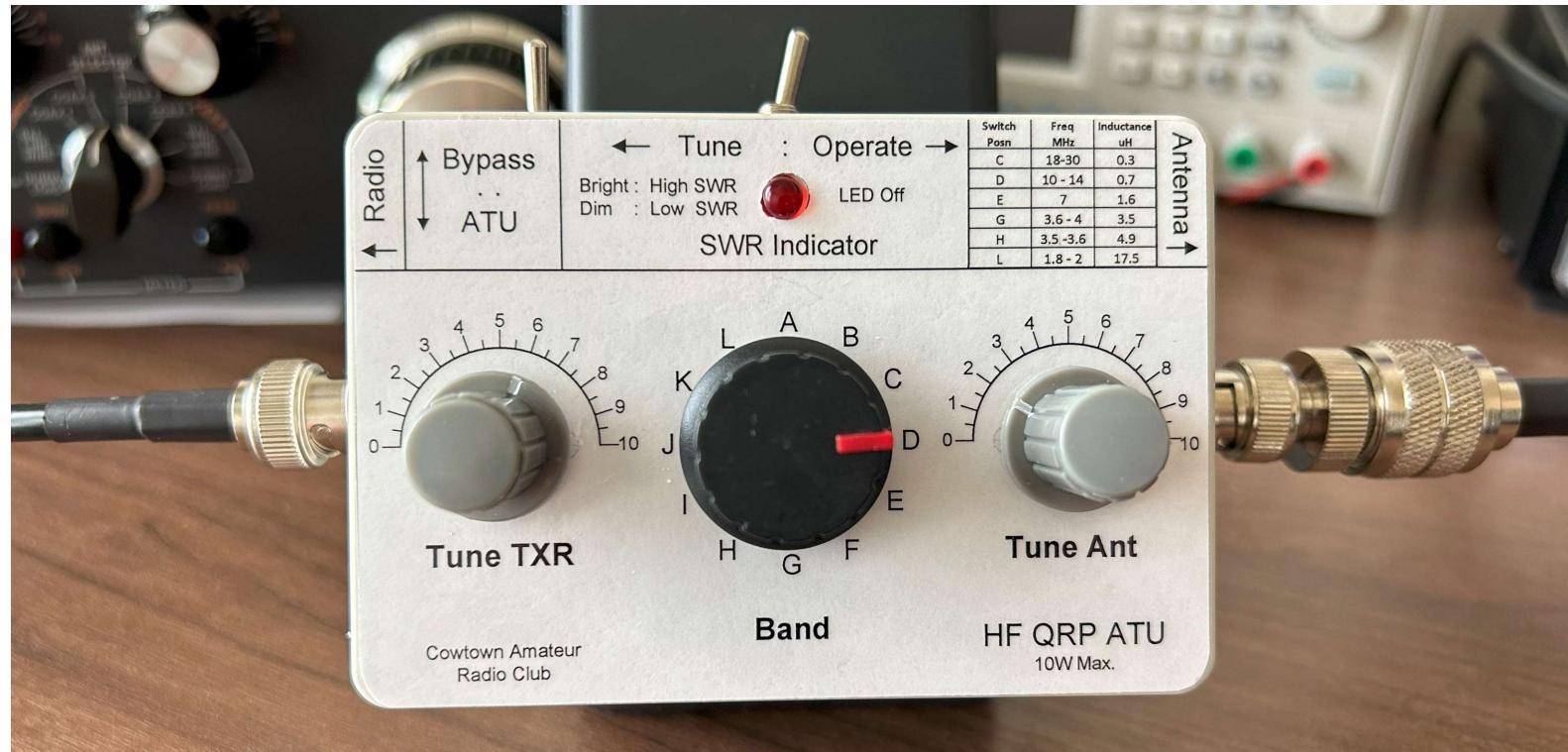


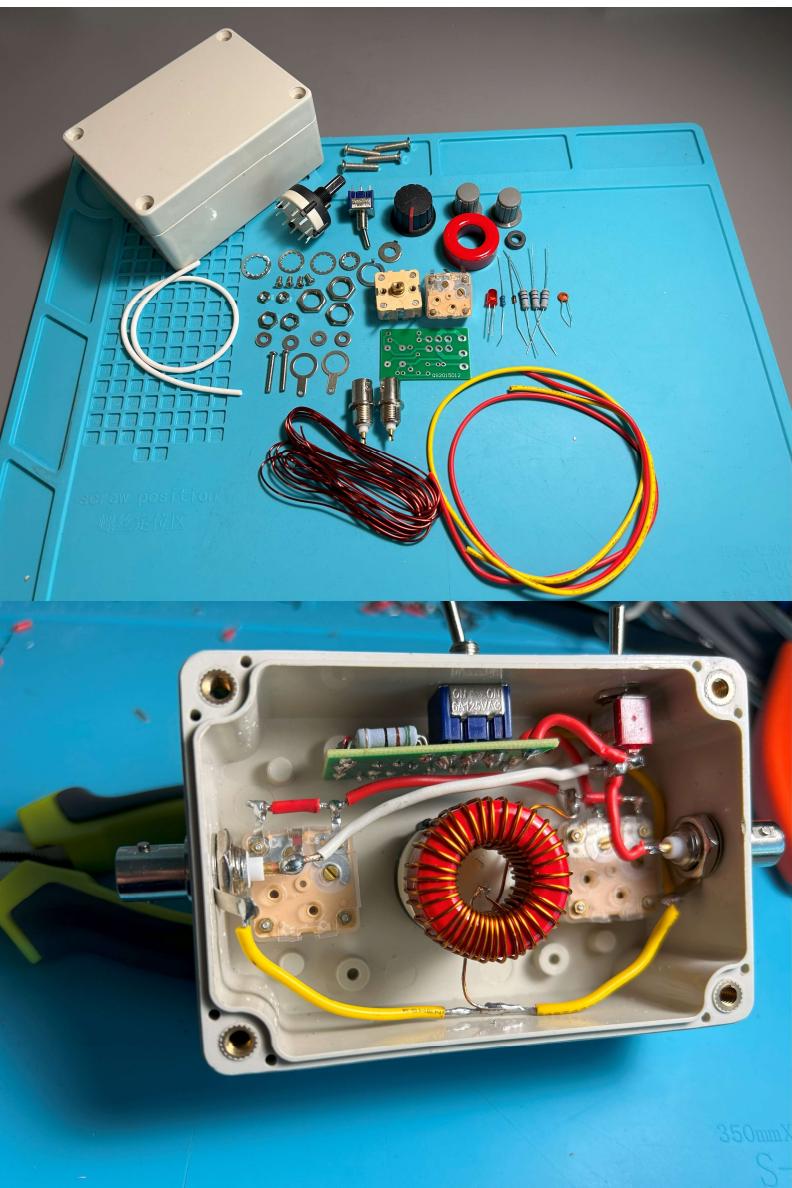
'Buildathon' 2023



The Buildathon set out to provide three practical kits this year:

- Project #3: HF QRP Antenna Tuning Unit





The ATU Project ‘Buildathon’ Event #3

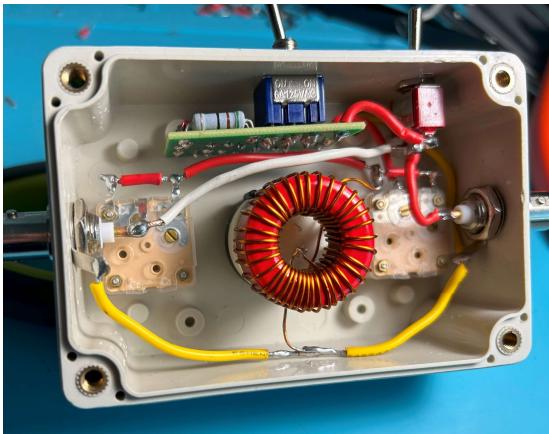
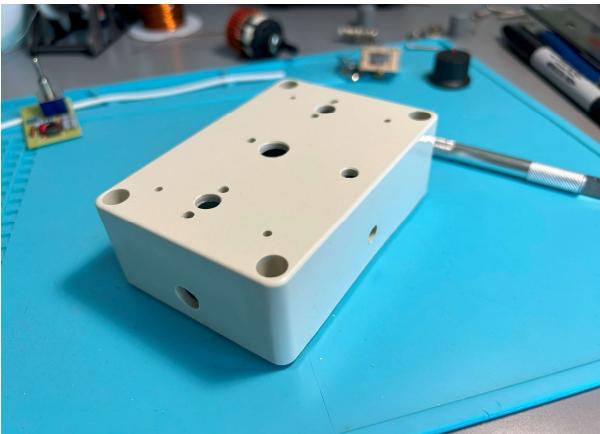
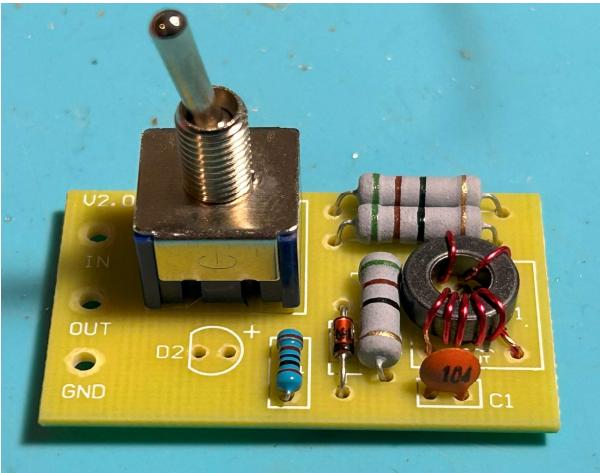


The ATU is:

- A practical addition to projects #1 & #2
- Provides a HF Antenna Tuning Unit (ATU) capable of supporting QRP radio's – up to 10w^{max}, and is a great little pocket sized and 'fit for purpose' ATU – It works well
- Is utilizes a 'T' matching network consisting or a switched inductance and two variable capacitors
- Has built in SWR indicator which can be used when tuning the antenna with the ATU
- Cowtown Kit incorporates:
 - ATU bypass switch
 - Templates to facilitate the correct drilling and placement of components, and a high-quality panel overlay
 - Detailed construction manual (similar in detail to the Cowtown ADX manual) see: <https://github.com/VK2ARH/Cowtown-ADX-Project>
 - Corrected all the errors with the original 'Chinese kit'
 - Identified by Carol KP4MD in her excellent video on the topic → <https://youtu.be/JceLhTV28oI?si=10w3uxhJedoQut1m>

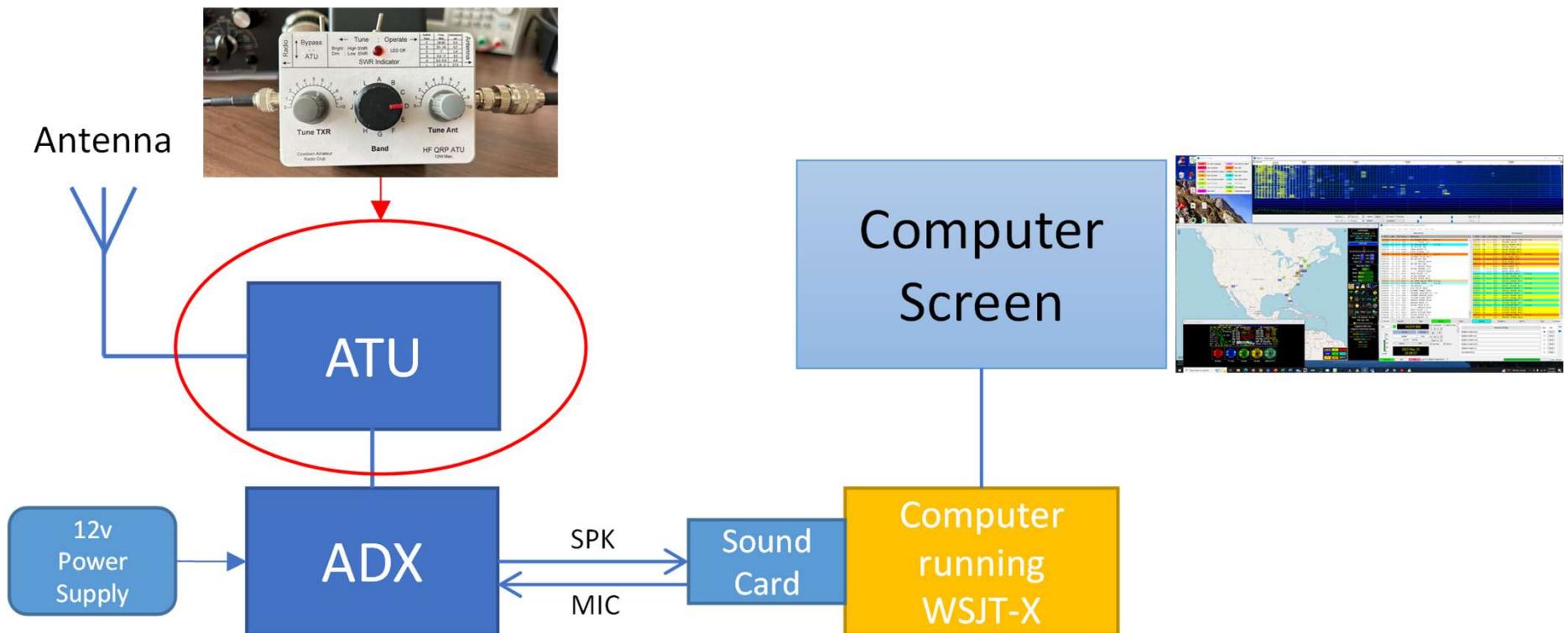
'Buildathon' 2023

- Project #3: HF QRP Antenna Tuning Unit – Stages of the Build



The ATU Project

'Buildathon' Event #3





The ATU Project

'Buildathon' Event #3

Logistics and Details:

- Cost of the kits will be \$15 including:
 - Detailed construction manual
 - All components required to build the kit
 - Bypass switch (not in the original 'Chinese Kit')
 - Replacement Magnet Wire (to make kit build easier)
 - Front Decal / Overlay
 - Accurate drilling templates for the ABS enclosure
- The club will supply 20 kits on 'first come – first served' basis.
- Kits can be reserved by emailing Richard W5ARH at cowntownadx@gmail.com. Payment or deposit will not be required until collection at the clubhouse.



The ATU will be the subject of the **Club Presentation Event** on the third Thursday in October – **October 19th 7.00pm** with a **supported build session** on Saturday **October 21st** commencing with breakfast next door to the club at 8.00am

QRP – ATU Manual Antenna Tuning Unit

Documentation from the Cowtown Amateur Radio Club (Fort Worth, Tx)
ATU Project and can be found here:

<https://github.com/VK2ARH/Cowtown-ATU-Project>

Contacts for the Cowtown Amateur Radio Club:

info.cowtownarc@gmail.com

<https://www.cowtownarc.org/home>

