SDR – Part 6

Websites & Components

I published a construction article in the June 2022 publication of Practical Wireless Magazine.

Electronic viewing of the magazine, as part of a subscription, is here: https://pocketmags.com/eu/practical-wireless-magazine

Here are links to the website I quote and some information on the relays I used.

Samuel

1. Website

Makis Katsouris (SV1AFN)

https://www.sv1afn.com/

I am not sure if the dual J310 Push-Pull Low-noise HF pre-Amplifier kit is still on sale. When I check on 6 May 2022 I could only see the build and tested pre-amplifier here –

https://www.sv1afn.com/en/product-category-5/2x-j310-push-pull-low-noise-hf-pre-amplifier-500-khz-54-mhz-diy-kit-2.html

On 6 May 2022 it was on offer for €45.

Likewise the 0.03 – 54 MHz version can also be bought build and tested.

2. Components

Relays.

In the end notes I mention that in the schematics I show the relays as type LX200B00 which were made for many years by CP Clare and of which I had a number to hand. However, when

I came to purchase some more to finish the attenuator I discovered that CP Clare is no more, and these relays do not appear to be available.

I go onto say that "I have changed to using relays from TE Connectivity that have AXICOM written across them – be careful which model you use as some require a lot of current to switch".

I have been using TE Connectivity model V23105A5501A201 as they are a good compromise for switching small signals, switching up to 3Amps, DPDT type and I got a tube for less than €1 each). They do however require 140 mA to operate. They are RS part number 718-1783 and cost €3.63 each.

A better option may be to use TE Connectivity model V23105A5001A201 as they only need 30ma to operate. They are RS part number: 196-6260 and cost €3 each.

You are paying for quality and reliability and it can be difficult to detect relay problems without decent equipment.

Axial Inductors.

Another lesson I learned the hard way.

I bought two bags of assorted axial inductors off EBay that came directly from China. They measured correctly and were within tolerance but needed to be treated gently. The wire leads were very thin and the tinning of the leads quickly corroded. I few bends near the body and the legs would pull away from the chip. A little too much heat and the same would happen.

I threw them all away and bought a selection from JABDOG electronics[1] (www.jabdog.com) which are good quality components.

Endnote.

I have no personal connection with or financial interests in SV1AFN.com, Radionics or JABDOG.

[1] Looks like a great new website is on the way. (9 May 2022)