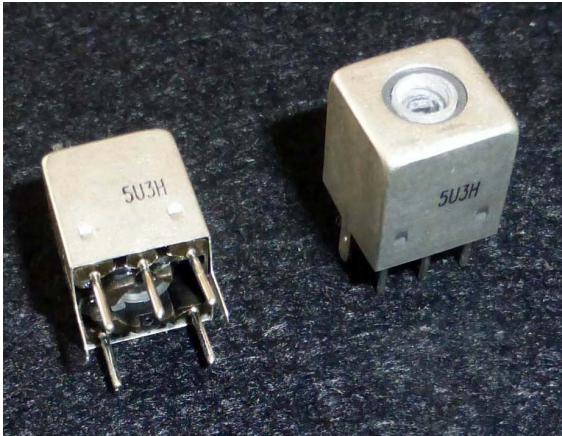


# AMX10 RF Condenser Microphone Project

## • INDUCTORS •



The inductors originally specified for this project are Spectrum type 5u3HH, which are supplied by Spectrum Communications in the UK. See here:

<https://www.ebay.co.uk/itm/Spectrum-10mm-RF-IF-coils-type-5u3H-TOKO-3334-3337-pack-of-5/282588615138>

These work fine where the capsule capacitance falls within the range 65 -100pF – and if you are based in the UK !

If the capsule values are smaller than 65pF these inductors tend to perform less well. In addition, if you are based outside the UK, Spectrum shipping costs can be quite high.

To combat these problems, it is possible to construct your own inductors using an almost identical coil former which is available cheaply from Aliexpress. See here:

<https://www.aliexpress.com/item/1005003604363316.html>

These can be used in conjunction with 0.11mm enamelled copper wire (magnet wire) which is widely available from a number of sources.... Like here for example:

<https://www.aliexpress.com/item/1005005547349267.html>

The notes below show how the actual Spectrum 5u3HH coils are wound. Of course the number of turns and turns ratios can be modified to suit your own requirements.

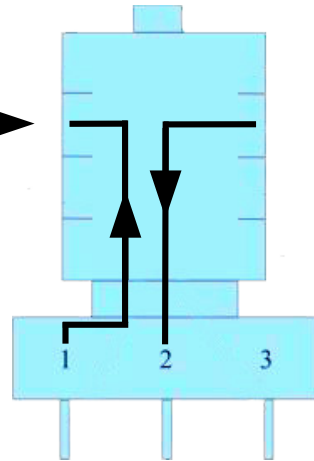
At this time, the modifications needed to for specific value changes will need to be determined experimentally.

Initial tests carried out by kingkorg from post #43 onwards in this thread on the Group DIY forum may help to offer some pointers? :

<https://groupdiy.com/threads/sennheiser-mkh800-mkh80-capsule-ks80.83049/page-3>

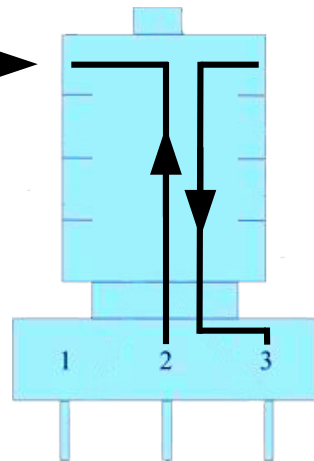
The diagrams on the next page show the winding details for the 5u3HH inductors...

Secondary winding  
(1<sup>st</sup> half)  
**10** turns clockwise  
(2<sup>nd</sup> tier of bobbin)



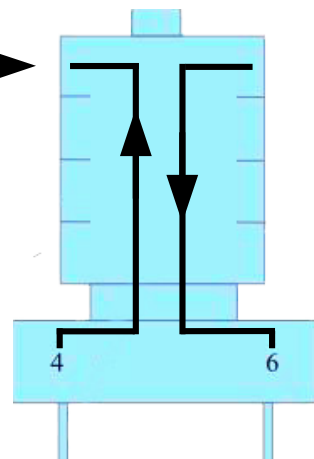
Solder start of this first winding to pin 1...  
.. wind 10 turns clockwise ..  
Solder exit of winding to pin 2, and continue  
that winding to second half shown below...

Secondary winding  
(2<sup>nd</sup> half)  
**10** turns clockwise  
(top tier of bobbin)



Continue winding from pin 2, and terminate  
final exit of winding to pin 3

Primary winding  
**4** turns clockwise  
(top tier of bobbin -  
overlays secondary  
winding)



SPECTRUM 5u3HH winding details

rogs 7.23