

KH6NO/W7

NØSS's -- K6XX SMD Visible LED CW Tuning Indicator Kit REVIEW

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by: Willie Hew, KH6NO/W7

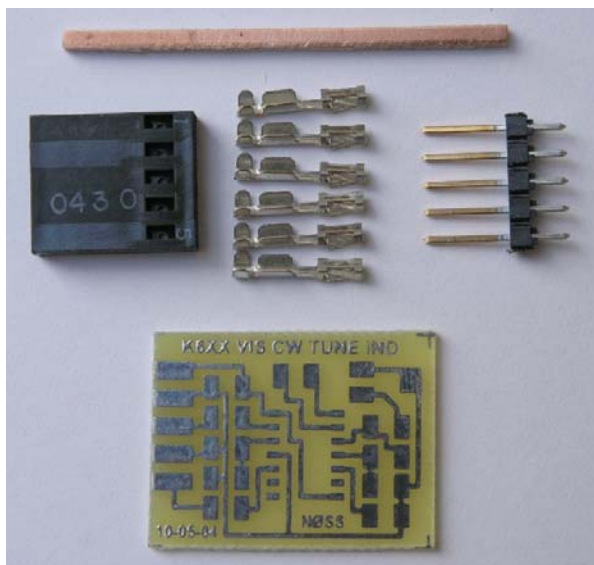
- My FIRST and ONLY, SMD kit building experience.
- NØSS (Tom Hammond) has produced an excellent FIRST CLASS kit of the K6XX SMD Visible LED CW Tuning Indicator for the K2.
- email: nØss@earthlink.net (the "Ø" is a ZERO, not an 'oh')
- For complete Assembly and Alignment information – GO TO :
- http://www.n0ss.net/k6xx_cw_tun_ind_smd_v2_assy-align.pdf

My kit came in 2 plastic bags. Bag ONE contained the following SMD parts separated into their own INDIVIDUAL compartments, to prevent component mixing. (Bag ONE is no longer used in v2.24 kits)



Bag ONE

Bag TWO contained the following: SMD holding stick, female receptacle, socket pins, male header and PC board.



Bag TWO

- Document v2.24 dated 11/21/04, uses "different colored tape" for SMD component identification.
- A step by step check off list along with excellent rendered colored drawings for PC board component placement and wiring have been provided. Lots of time, energy and "brain power" have been expended by Tom NØSS to make his kit a "satisfying and successful" building experience.
- IF you follow all of Tom's instructions to the "letter", you will succeed and have a working LED CW Tuning Indicator.
- My build time was 2 hours from BARE PC board to one that had all components soldered into place. I took my time, making sure I had no solder bridges and "DOUBLE CHECKED" all components were on their correct pads before applying solder. The use of a magnifying glass to check your work is mandatory.

NØSS's REVIEW SCORE: ★★★★★ 5 STARS

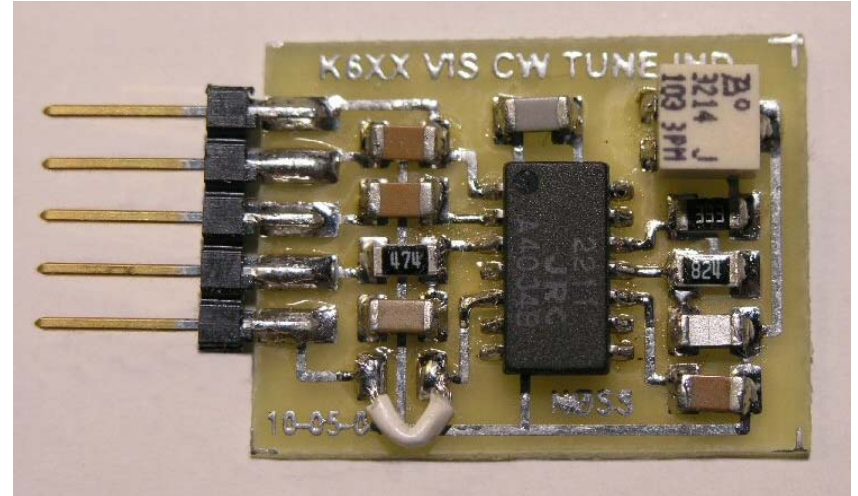
BUILDING SUGGESTIONS:

1. If possible use: Hakko 900M-T-LB/P 0.2mm (.008") Radius Extra Long Needle Point Tip for Hakko 926 and 936 soldering stations.
2. Apply the least amount of solder to bare pads, so pad remains flat and level. If too much solder is used, pads might become uneven, which will lead to uneven SMD mounted components.
3. After I soldered pins 1 and 8 of NJM2211 SMD IC – I found pins 9 through 14 FLOATING SLIGHTLY ABOVE its assigned pads. I used the (included) SMD holding stick to gently push each pin down, until it made contact with its designated pad.
4. Use the SMD holding stick to your advantage and to help in positioning of SMD(s). Easy does it and Enjoy the SMD Journey!

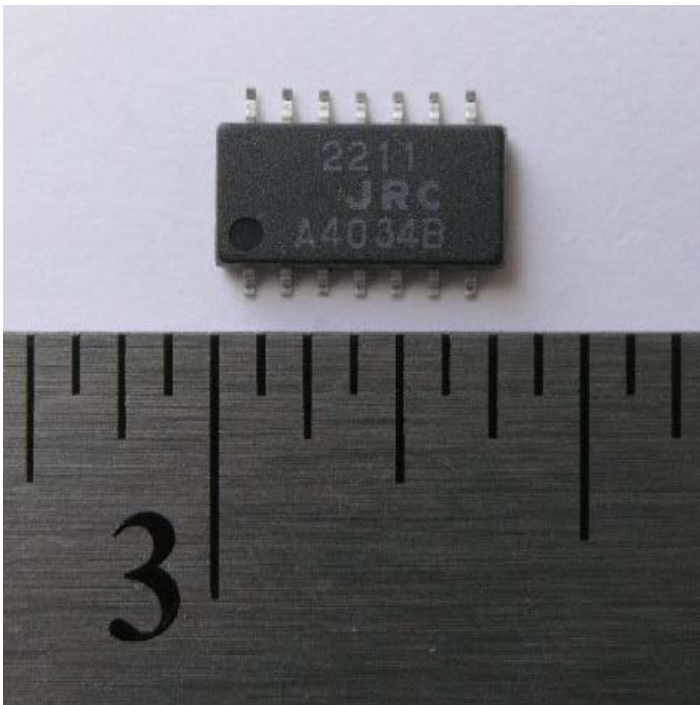


SMD component sizes using 3" ruler reference

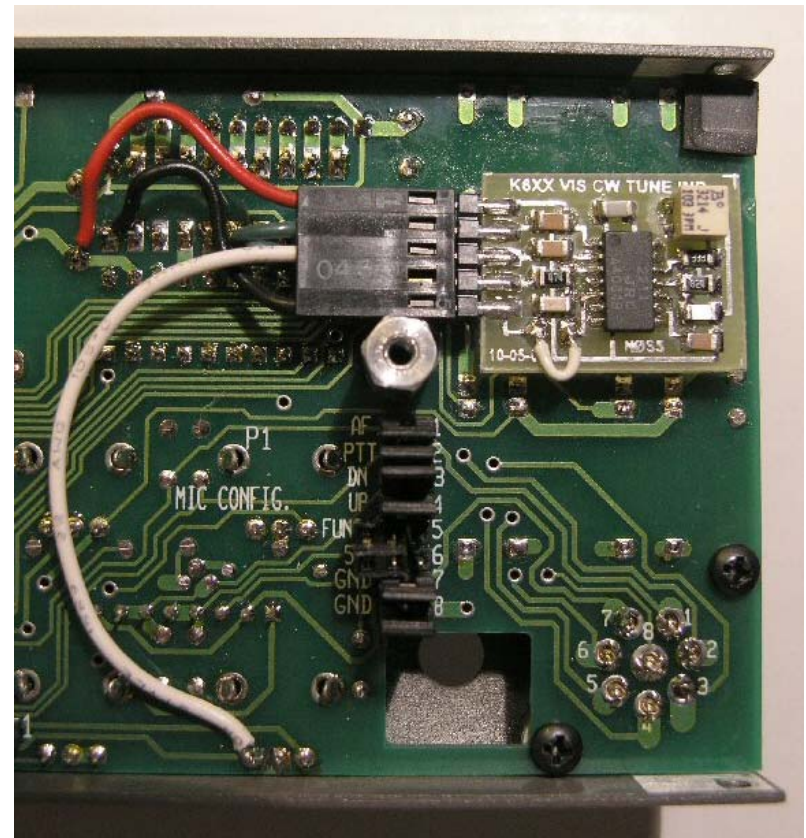
SMD component sizes using 3" ruler reference



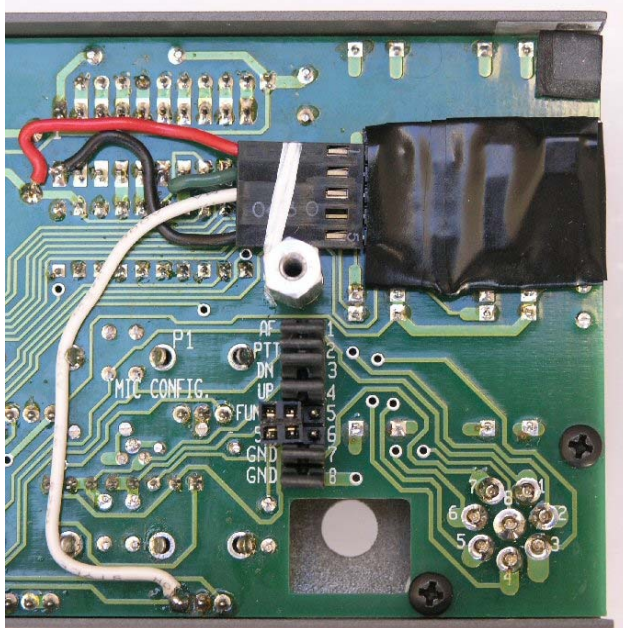
Completed PC Board with installed SMD components



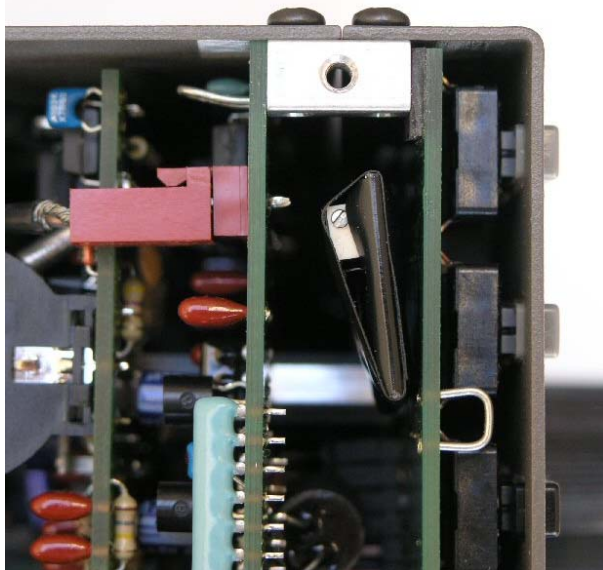
NJM2211 SMD IC size using 3" ruler reference



PC Board installed in K2 #1593 to check fit and clearances



PC Board insulated with Scotch 33 electrical tape and female receptacle secured to hex standoff with dental floss.



Side view of installed PC Board, with K2 LEFT SIDE PANEL REMOVED. Trimpot adjusting screw is readily accessible.

CONCLUSION:

- YES, the K6XX SMD Visible LED CW Tuning Indicator I built worked the FIRST TIME when K2 final installation was completed.



Following Tom's alignment procedure and as a TEST: I hit my SPOT switch while listening to the approximate 7.00000 MHz internal K2 signal. With my EYES CLOSED, the K2 dial is turned until the SPOT signal audio disappears behind the 6.99999 MHz signal. When I opened my eyes, the 10th LED on the S-METER bar is brightly lit and LCD display showing 6.99999 MHz, telling me I am ZERO beat with the received signal!

- The K6XX SMD Visible LED CW Tuning Indicator kit by Tom NØSS works very well. Thank You Tom...
- Tom NØSS, has done another fantastic job assembling, and writing the documents for this project. Tom has also provided all the measurements needed to troubleshoot any possible problem that might occur.
- I hope this REVIEW will give prospective builders another "angle" about this SMD project and what is involved.
- If anything, I hope this REVIEW generates "more confidence" in builders who want this LED CW Tuning Indicator for their K2.
- GO FOR IT! Life is too short for NO SMD...

Best 73's,
Willie Hew
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