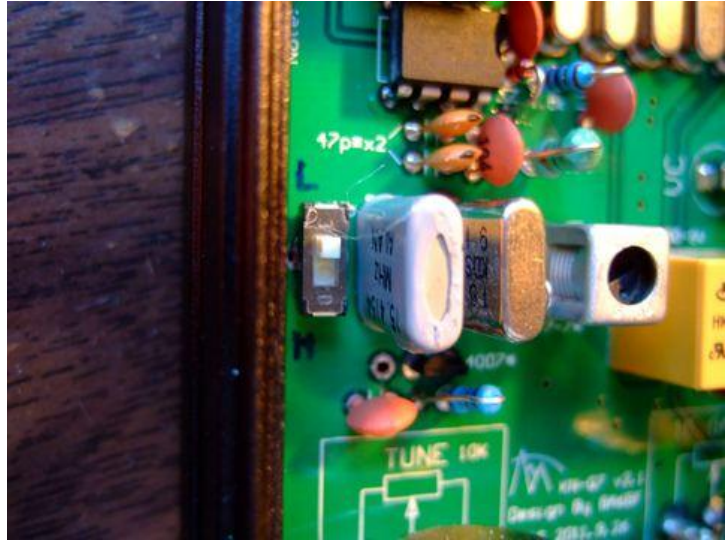


KN-Q7A Application for Multiple Frequency Operation

By Larry Lovell (N7RGW)

Thanks for suggestions from: Edgardo Maffia (LU1AR) and Mark McNabb (N7EKU)



By design, the KN-Q7A has limited tuning capability. In order to add additional band coverage in the 40 Meter band, you need to add an additional crystal.

You must choose crystals such that they use the same IF frequency. There are two IF frequency options available:

IF Frequency 8.467 MHz

LO: 15.536 MHz

LO: 15.570 MHz

IF Frequency 8.192 MHz

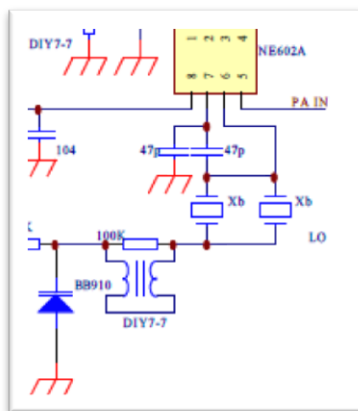
LO: 15.360 MHz

LO: 15.418 MHz

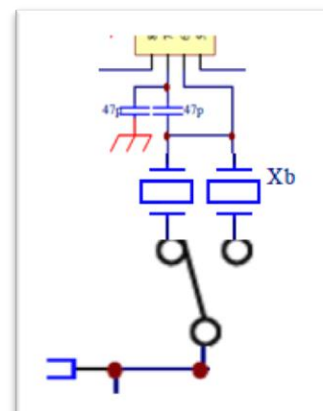
LO: 15.500 MHz

These are the options offered by Adam. The basic equation is Transmit Frequency = LO frequency – IF frequency. Therefore, if you purchased an IF of 8.467 MHz, you have two crystal options, one additional to what you purchased with your kit. If you purchased the 8.192 MHz, you have three crystal options. In the schematic, the IF crystals are referred to as X_a while the LO is referred to as X_b .

Original



Modified



Switch can be a relay if desired!