

# So You Want to be a QRP Builder? Updated 2006 Version

By Doug Hendricks, KI6DS  
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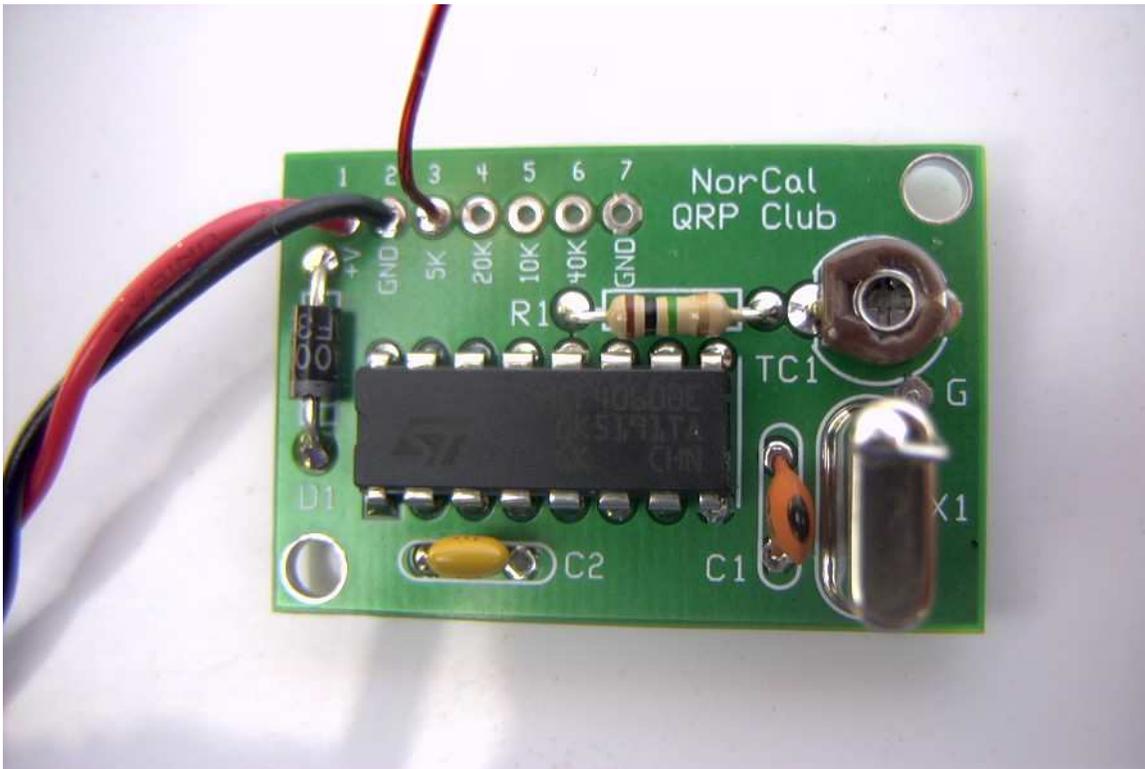
## Part 1

The first two kits that we will start with in the series will give you a taste of two of the types of construction, through hole, and smt. Both of them use a pcboard, through hole as the name implies uses parts that fit in holes predrilled on the board. SMT construction involves a type of construction that uses parts that mount on the surface.

The NorCal QRP Club sells 2 kits that are ideal for this introduction. The VE3DNL Marker Generator, and the NorCal SMT QRP Dummy Load kit. Both of these kits cost \$7.50 shipped to you, and both of them contain all the parts that you need to finish the project. \$7.50 for a kit is cheap. Not a bad investment to see if you like this part of the hobby.

One of the goals of this series is to suggest a series of projects that can be easily duplicated, fun to build, have quality manuals, and provide a useful piece of equipment. Both the VE3DNL and the NorCal SMT QRP Dummy Load meet all of those specifications.

Let's start with the old favorite, the VE3DNL Marker Generator.. It is pictured here.



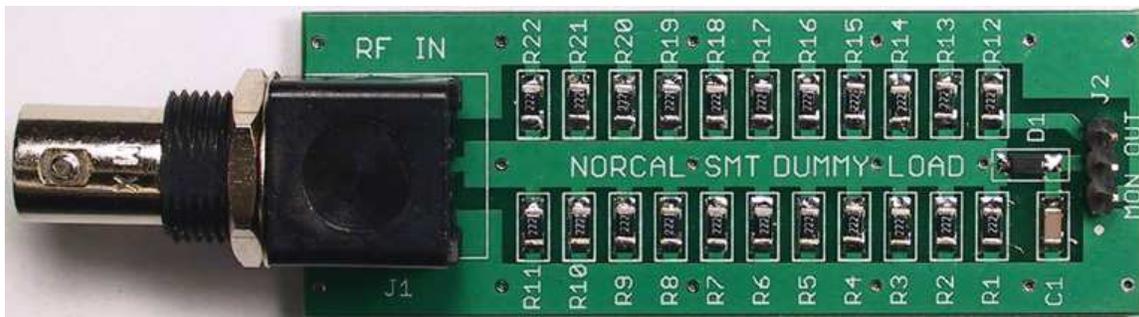
As you can see it doesn't have a lot of parts and isn't very big. The board has 7 parts to mount, plus you have to supply power and output. That is it. It can be built in an

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evening, checked out, and even mounted in a box if you want to. The one pictured above was built by me, and I have not put it in a box yet, but plan to. What does it do? It is a marker generator that provides a tone at various outputs and harmonics of those outputs. You use it as a signal generator, and several other uses mentioned in the manual. I cannot believe how useful mine is, and I use it on almost every piece of equipment that I build. Check out the manual and you will see several other ways to use this piece of test equipment. The purpose of these articles is not to take you through building these kits, but to explain what they are and show you what they look like.

The next kit is the NorCal SMT QRP Dummy Load Kit. This one is so cool. It uses SMT parts, and when you finish, you will be amazed at how easily it can be done. More and more kits are using surface mount parts, and we will see even more in the future. This kit is the perfect tool to use to see if you can build using SMT techniques, and I bet that you can. The kit comes with everything needed, all of the parts, quality board, connector, and when you finish you have a very useful piece of station equipment. And it is not just a dummy load, no this one provides a way to measure your output power too!! Here is a picture of the NorCal SMT QRP Dummy Load Kit.



The only through hole part is the connector on the left side. It is a BNC pc mount, and has been used on many, many qrp kits. As you can see there are lots of resistors to solder, plus there are just as many on the other side of the board, 44 to be exact. That is the beauty of this kit for the first time builder. You get lots of opportunities to practice the skills that you are trying to acquire.

What do you do now? I would suggest that you go to the NorCal QRP Clubs Website, and click on the NorCal Kits button. There you will find the manuals to these two projects. Read them, and see if you think that you can build them. If so, order the kits, and jump in. Enjoy and have fun. 72, Doug, KI6DS