

## The ZL2BMI Double Sideband Transceiver

Firstly, my thanks to Richard ZL2RDY for putting these pages and information on his website.

What you will see through accessing this page and downloads is the cumulative work spanning over about 25 years.

It began with the need for a small 80m rig to use when tramping (= bushwalking or backpacking or hiking in other countries), in remote areas of New Zealand where only hf communication is generally possible, and the equipment may need to be carried along with up to 7 days gear and provisions. I'm a small guy and not particularly strong, so light weight was essential!

The first rig weighed about 500gm (not including the battery and aerial), and this was used on a 4 day trip (planned to be 7 days but the weather beat us out), on the St James Walkway, about 1983. Because it proved extremely useful (due to the need to change our plans as the weather changed), I wrote an article for the national ham radio "Break-In" magazine in 1984. There followed a huge deluge of mail, and I subsequently wrote a booklet, of which 400 copies were printed, and later about another 400 were photocopied.

The booklets were sold through the G-QRP club as well as locally, and more mail flowed from around the world. I also wrote another follow-up article for Break-In.

I also had requests for fully built-up rigs, and though I didn't really have much time for that, I eventually sold about a dozen - all slightly different.

I did eventually build a "standardised" rig in a piece of rectangular cross-section plastic downpipe, and sold three of these. These had a "manual" (described below).

I will not try to reproduce the articles from Break-In, as nearly all the info, and much more, is available in the booklet and the "manual" to the standard rig.

The final and smallest rig, which is built in a 75mm x 50mm x 25mm wedding cake tin, weighs about 90gm. With battery and aerial, all of the hf gear can be got into less than about 450gm weight. This rig was the second of that size, and was built more than 10 years ago. Recently its 14pf tuning cap was changed because of wear. Also at that time it had a mod (published in a Break-In this year), which enabled a fixed (crystal-locked) frequency to be used, without a switch, while still allowing tuning of most of the 80m band. Details of this are not yet included on the website.

Hopefully you will be able to download at least two items initially -

1. A PDF of the original booklet. You are welcome to print this for your own use, or the use of other ham ops, but please don't copy it for sale (or inclusion with a kit) without my permission.
2. The "manual" of the standard rig - which consists of 4 A4 pages giving the circuit diagram, some notes and the approximate layout of the components. Remember, these were notes accompanying a rig - not building instructions.

All rigs are built using a kind of uglybug/surface mount style, and standard components. Note that if you do not have a ground plane underneath the boards you will run into problems.

I will try to get some close-up pictures onto the website at some stage.

73 and good homebrewing!

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