

'HOME BREW WITH KITS'

We think that kits are a good idea. Buying black boxes off the shelf has become a retrograde habit in recent years and anything which enables amateurs to get their hands dirty will improve the quality of the hobby. The few notes which we've put together clearly show that it is possible to build nearly everything which you can buy from your local emporium. And if you start off with a decent kit, the performance of the finished article will be just as good.

Save money, get the satisfaction of running gear which you've built and give yourself something to talk about once you're on the air. That's what kits and homebrew is all about.

With the ever increasing cost of ham radio equipment it's not surprising that there is a tendency towards "home brew" or the modification of some of the older commercial equipment; but this is not always a satisfactory answer to the problem.

Generally "home brew" runs into difficulty sooner or later with the purchasing of small quantities of components. Whilst there are still a number of component suppliers, advertisements gracing the magazines, they are a dying breed and the range of components offered is limited.

The simplest answer to lower cost equipment (notice I say lower and not low) is the construction from kits of some of the more exotic pieces of equipment. However kit building can conceivably cost more in the long run if you take into account the construction time and perhaps the cost of having it aligned.

Heathkit were one of the first companies to produce kits for the home builder. Their claim of little or no experience required to build their kits is certainly true of the simple equipment, but a project like a transceiver, despite any incredibly simple step by step illustrated instruction manual, a reasonable

degree of construction experience is required. Even so, this is still a relatively simple approach to owning a sophisticated piece of gear which you have built yourself.

Kit building gives a great deal of satisfaction and considerable experience in handling tools and components. Just about every kit manufacturer is willing — for a small fee — to fault find and get your kit working if you are in trouble.

Some manufacturer's instruction sheets do leave something to be desired; things like not being familiar with colour codes or the connections on transistors, are small points that can make or mar a kit. It's very much a case of "you pays your money and takes your pick".

The following are just some of the kit manufacturers or distributors. All have comprehensive catalogues for the asking —

**Timestep Electronics Ltd.,
Egremont Street,
Glemsford, Suffolk.**

Timothy Edwards MK 2 144 MHz Pre Amp Kit has a noise figure of 0.7 dB at 200 MHz **£4.95**

Timestep Digital Frequency Counter Kits DFC4: 3½ digit

readout measure up to 150 MHz for use with 22 different IF offsets for use as a Digital read out for receivers. FM4 Tune Kit covers 87.5 to 108 MHz, also AM 525 — 1650 KHz and 155 to 270 kHz. Digital read out kits for use with FRG7 — SRX 30 and SSR1 receivers.

**Piper Communications,
4 Severn Road,
Chilton,
Didcot, Oxon OX11 0PW**

Piper Communications are the sole distributors of the German manufactured SSB Electronic equipment. Their range of kits include:

Receive Converter Kit for 23 cm with IF's for 28 or 144 MHz. A Linear Transverter 144/28 MHz kit, input power 0.8 — 15 watts output power 1 — 30 watts.

2 metre Transverter TV28144 kit enables 10 metre Transceiver to be used on the 2M amateur band, using a Schottky ring mixer for transmit and receive mixing and a low noise dualgate MOSFET RF amplifier.

144-432 MHz high quality transverter kit. Using low noise high stability 96 MHz oscillator. Providing reference signals for the fet mixers — IC regulators stabilise oscillator dc power supplies.

70 cms Transverter System Kit.