# *How do I use GB3YT?*

**Receiving GB3YT**

You need to obtain a suitable Free To Air (FTA) digital satellite box. Sky boxes can not normally be configured for use unfortunately. As the LNB input on the receiver covers the 23cms band there is no need for a converter (or an LNB!), just connect the aerial straight into the F socket at the rear of the receiver. Don't forget that the aerial will be a short-circuit to the dc volts sent up to power the LNB, so switch it off in the firmware menu of the receiver first, or use a DC isolator. You may have to set the LNB offset frequency to 10000. This will let you enter the desired frequency with a 1 in front i.e. 1316 MHz would be entered as 11316. FEC should be auto and the symbol rate is 4Ms/s. Some receivers will work with an LNB offset frequency of 0Hz which means you can enter the exact frequency you need i.e. 1316MHz. Another point of note is that satellite receivers are inherently deaf which means you may need a 23cm pre-amp if you are some distance from the repeater. Those more local will have a stronger signal and may not need one. Sensitivity of most receivers are usually in the order of only -65dbm (126uV) at best, and selectivity is normally very wide so you may also need a filter centred on 1316MHz to stop spurious signals de-sensing the receiver.

**Transmitting into GB3YT**

Getting into YT is comparatively straight forward. You can now use older analogue 23cm transmitters and send a simple 15.625KHz/50Hz PAL signal on 1276MHz. This will switch the repeater into 'repeat' mode with your signal being relayed on 1316MHz. For those using a DTX1 or similar digital transmitter, all you need is to set the symbol rate at 4Ms/s, FEC to 1/2 and transmit on 1276Mhz. From July 2018, you can also use 437MHz at 2Ms/s with an FEC of 1/2. The repeater can accept more than one input signal and will display quad screen if being used 'duplex'.