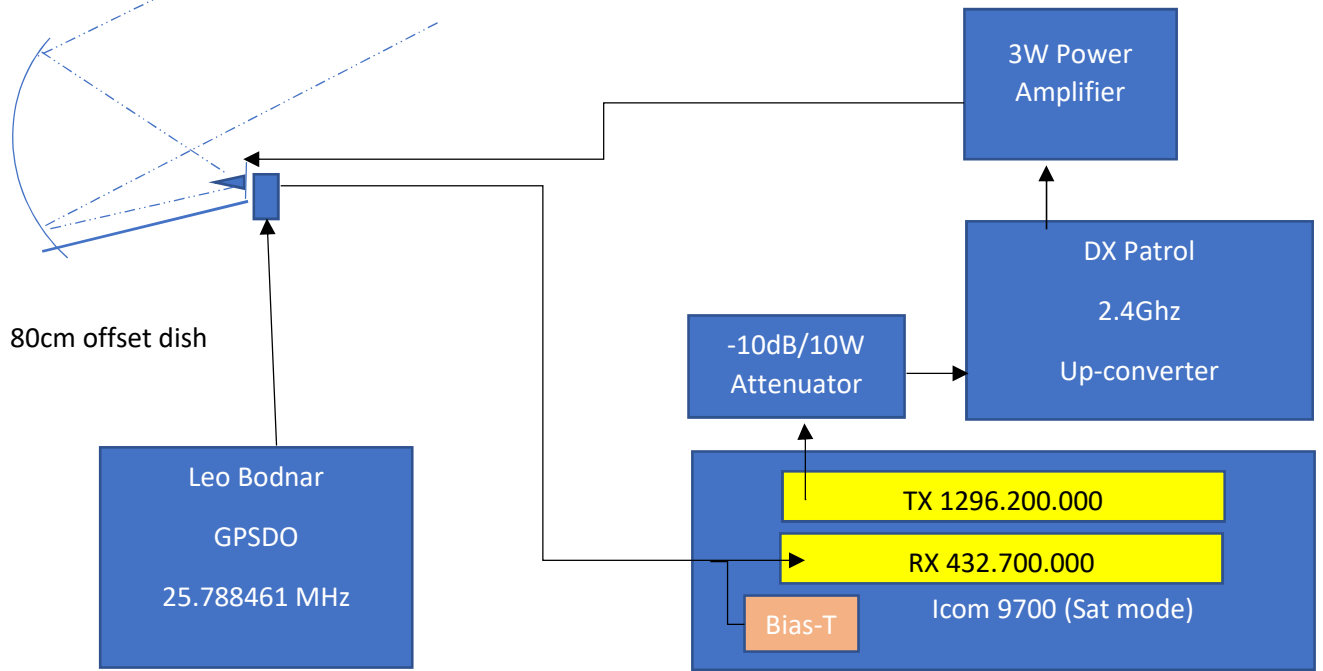


# G6GEI OSCAR 100 Solution



LNB modified from 25.000 reference to 25.787180 this drops the IF from 739.55 to 432.55 (70cm) (ref Freq x 390 is the LNB mixer frequency). I tried to get the IF into 23cm band but it cuts off at about 1Ghz so there must be a low pass filter in the LNB. (LNB came already modified by DXPatrol but can be done DIY). The 9700 supplies 12v to power the LNB via the 'external pre-amp' feature.

I found the Power Amplifier gets very warm, even on Rx, so fitted a cooling fan. The fan runs slowly (50-ohm resistor in power line) so makes no noise but keeps the whole thing cool.



I replaced the reverse polarity SMA connector on the amp with a standard polarity one to make cabling easier.

A length of 3m of 10mm Hyperflex connects the amp to the patch antenna with pigtailed at each end. Tuning the radio tunes both Tx and Rx frequencies in sync. (antenna on wall outside shack)

Receive at 432.771 represents downlink 10489.771 uplink frequency of 2,400.271 MHz so easy.

The solution is stable (no drift) and so far, only good reports from stations worked.



Patch and LNB

9700 in Sat Mode

