## THE FUN CUBE DOGLE HF CONVERTER

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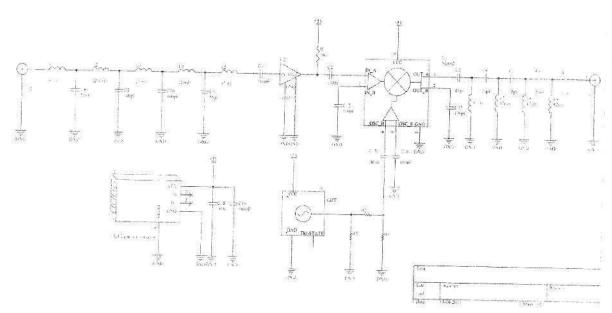
If you are a FCD owner im sure you are a very satisfied with is quality and performance receiving satellites and all sorts of communications in VHF and UHF.

However, the FCD only starts receiving properly from 64Mhz up and misses all the good fun that is receiving HF and 6m en a SDR.

That is why we decided make a simple HF converter to the FCD and get access on all the bands, extending the RX now from DC to 1700Mhz.

The HF converter is very simple, as you can see in diagram, any person with some soldering and kit build, will have no problem to get it work.

## Circuit description:



The Filter on the Input is a LowPass Filter.

Designed the aloud only frequencies from DC to 52Mhz travel into the mixer.

The U2 is a optional pre-amplifier, however we are bypassing the stage due the circuit have enough gain.

The Local Oscillator is a crystal clock and runs on 106.250Mhz. (this is our IF)

The mixer NE602AN, (same as Elecraft) making the conversion of signals.

In the output we have another filter, Hi Pass Filter, preventing image frequencies and aloud only the signals up 100Mhz be received by the FCD

VCC, 5V are supplied from a USB connector.