

HF SIGNALS

The Home of BITX transceivers

MBITX TUNEUP

The μBITX comes pre-aligned. You should do this only if you really think it is out of alignment.

There are three things to be tuned up.

1. PA BIAS

- Switch off the rig
- Locate the two PA bias presets (the blue square ones)
- Set both the presets to fully clockwise position, gently.
- Attach a dummy load or a low SWR antenna and switch the rig on
- Attach a current meter to the power supply so can monitor the current draw
- Switch on
- Press the PTT without speaking (no modulation)
- The current draw should be between 470 mA and 500 mA
- Slowly increase one of the two presets until the current increases to by 100 ma
- Do the same for the other preset (the total current should have increased by 200 ma now)
- Now, blow a loud HALLLOWWW into the mic.

Does the current flick up? You're done with PA Bias

2. Aligning the master clock

All the frequencies of the μBITX are derived by multiplying/dividing to the required frequency from a single 25 MHz crystal. This crystal is rarely at

exactly 25 MHz. We have to calibrate this clock to the exact frequency. Here is how it is done

- Click on the encoder button to display the menu, rotate it to the “Setup On?” and click on to confirm it. This enables the setup options.
- Tune to an AM broadcast signal with known frequency.
- Set the dial of the μBITX to read the exact given carrier frequency of the station. If your calibration is out, this will NOT be zero-beat.
- Click on the encoder button again to display menu and this time it will show up a new option ‘Set Calibration?’. Click to enter this option
- Now zero-beat to this signal (the frequency display of μBITX will remain the same)
- Press PTT to save the calibration.

3. Setting the BFO

- Click on the encoder button to display the menu, rotate it to the “Setup On?” and click on to confirm it
- Tune to a clean and preferably weak SSB signal to its loudest (not the clearest)
- Click on the encoder button again to display menu and choose Theoption ‘Set the BFO’. Click to enter this option
- Now tune with the encoder for the best sounding audio
- Press PTT to save the calibration.

Done.