Setup Levels for NEC Links

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NEC link – Exciter card RV51 Gain control RV52 Deviation pot Tx power set RV54 for 5w (max) [check max power is >10w]

Modem Level

Input –10dBm (2400 baud) into NEC link (2400 baud modem PCB - CN6 jumper pins 1 & 2)

NB: Each time the MFJ TNC's enter CAL mode, the output tone toggles between high and low frequency. Ensure you check both tones when checking deviation. Do NOT exceed 3.5kHz deviation.

Max DEV

Set RV51 full clockwise (max gain) Input tone from modem (-10dBm 2400 baud) (or –10dBm 1.7kHz tone) Set RV52 for ±4kHz deviation [max dev]

Modem Deviation 2400 baud

Adjust RV51 for 3kHz deviation, check alternate tone and confirm both are about \pm 3kHz deviation and less than \pm 3.5kHz Deviation. (typically 2kHz low and 3kHz high)

Alternatively input –5dBm, 1kHz tone, adjust RV51 for 3kHz Deviation. Check with input of –10dBm 1.7kHz tone, deviation 3kHz.

Check 1200 baud

Adjust TNC R76 for –13dBm (Max gain) Confirm Deviation is ±3kHz (max) for 1200 baud (hi tone) Check low tone is about ±2kHz (1200 baud)

Audio shape

Check audio shape on deviation monitor, if badly distorted replace electrolytic caps

DCD 1200 baud

Generate 1200 Hz then 2200 Hz, check level (deviation) for DCD to light. Should be less than \pm 500Hz deviation (1.7kHz tone).

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