

Tektronix Test Equipment Operation

0 dB Level set for Audio Oscillator:

note: The AA501 Distortion Analyzer only reads dB in the audio spectrum.

1. Patch from the audio/dB source to the AA501 Distortion Analyzer
2. Set controls as follows:
Input level range to Auto Range
Function to Level, dBm 600Ω
All filters off.
3. Adjust level at audio/dB source to obtain a reading of 0 on the AA501, this level can now be used to calibrate meters in the van.

Distortion Checks:

note: This test uses an HP 8640B Signal Generator as a receive signal source, to test actual incoming signal distortion, have distant end transmit a steady tone on frequency to be tested.

1. Set 8640B to 1KHz above the receive frequency for A1 sideband, 1KHz below for B1 sideband, ie. 5.000 MHz on OK-145 requires 5.001 MHz on the 8640B for A1, 4.999 for B1.
2. Set 8640B output level to -110 dBm RF OFF
3. On Tektronix AA501 Distortion Analyzer set controls as follows:
Input Level Range to Auto Range
Function to Level, dB Ratio
4. Patch the receive audio for the sideband under test from the 1A5 jackfield to the input on the AA501.
5. Set 0 dB reference by pressing the Push to set 0 dB ref button on the AA501. note: The RF must be OFF at the 8640B.
6. Once the 0 dB reference has been set, turn ON the RF at the 8640B and adjust its output until a reading of 10.0 is obtained on the AA501, this is the 10:1 ratio level that is ideal for reception.
7. To check incoming signal for distortion, substitute receive antenna for 8640B once the 0 dB reference has been set. The reading obtained will be the distortion level for that frequency.