AKG
acoustics
a Harman international company

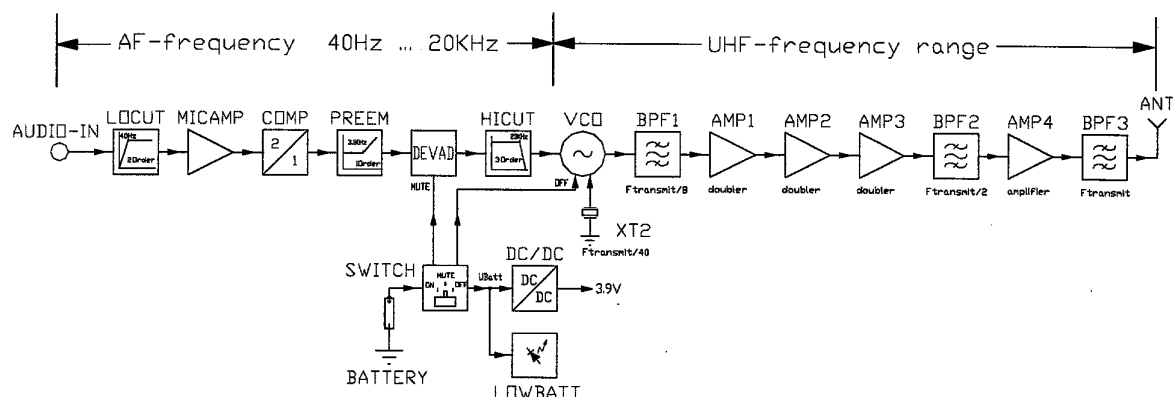*Micro-Tools Description*   *F&E/HF*

Block Schematics

Audio part:

The MICAMP is built as a part of the SA575- integrated circuit with a gain of 10.8dB. It also forms the <u>LOCUT</u> filter at 30 Hz. Then the signal is fed to the <u>COMP</u>ressor, where the dynamic of the amplitude is reduced to its half value, expressed in dB. This compressor is built with the integrated circuit SA575 from Philips. In the feedback loop of the amplifier (Pin 12 and 14) there is the variable gain cell connected, which controlls the amplifier-gain. The variable gain cell is controlled by the rectifier (input = Pin 16). C216 smoothes the rectified signal and defines the so called time constant of the compressor. R208-R210-C208-C209 build the DC path in the feedback loop.

The second amplifier is used to build the <u>PREEM</u>phasis circuit, which boosts the higher frequencies with an time constant of 50usec and a fixed gain of 9,8dB at the lower frequencies.

The <u>DEV</u>iation <u>AD</u>justment is done with the potentiometer R217. At an input level of 300mV/1kHz for the Snap-On-Transmitter (SO) and the Microfone-Pen (MP) or 1050mV/1kHz for the Guitar-Bug (GB), the deviation is adjusted to 15kHz (13,5kHz for the Spain Sets), which is the nominal modulation. In MUTE-position of switch SW201, the signal is shorted here.

T201 with the additional parts form the <u>HICUT</u> filter at app. 25 kHz/3rd order.

Via C102-R104 the signal modulates the crystal controlled oszillator.