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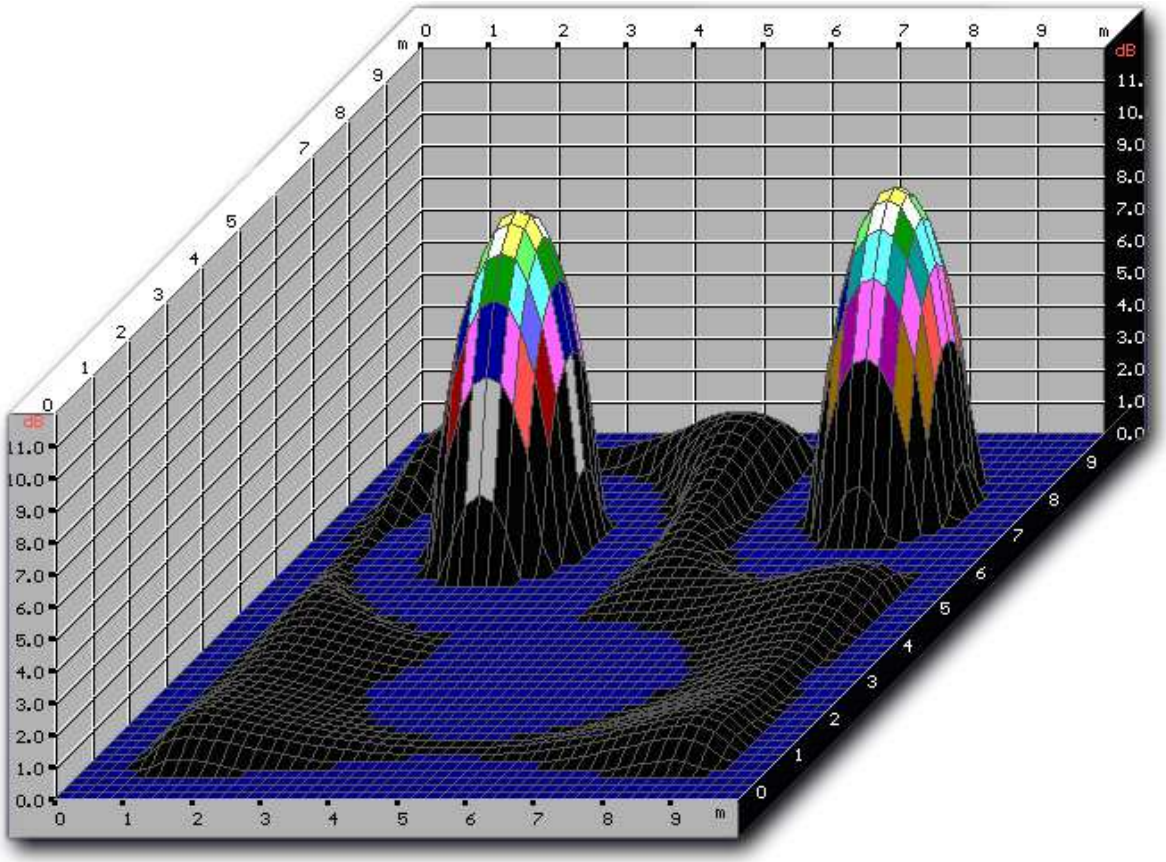
UniVox Loop knowledge

Measurement & Verification



Loop System Verification

Certificate of Conformity:

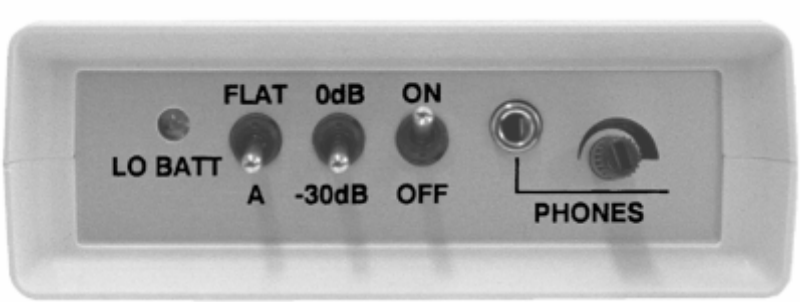
- Measurement Procedure
- Background Noise
- Coverage Area/Volume
- Frequency Response
- Field Strength Level

1. Measure procedure

Always hold the FSM

in vertical position

2. Background noise



Disconnect the loop-amp from mains power

Set the meter in A-filter, -30 dB position.

The measured level should be less than

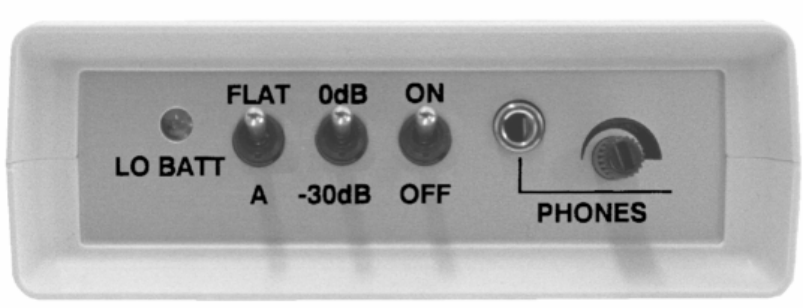
-32dB(A) in the whole coverage area.

Preferred -48 dB(A).

Expection, for short message system,

is -22dB(A) allowed.

3. Coverage area



1kHz sine-wave (track 8 on CD)

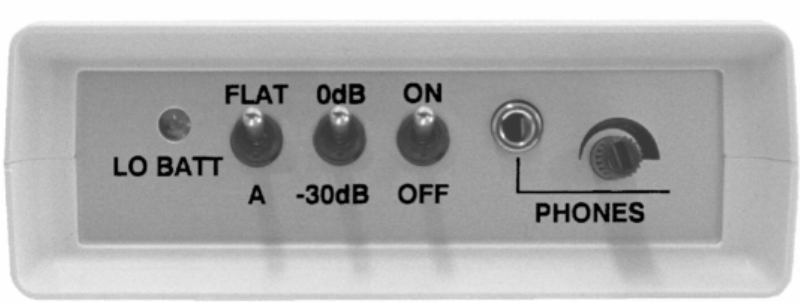
Adjust the input-level according to amplifiers instruction.

Set the output level to approximately -12 dB.

Set the filter to ”A” or ”FLAT”-position

Find the coverage area. ±3dB is accepted

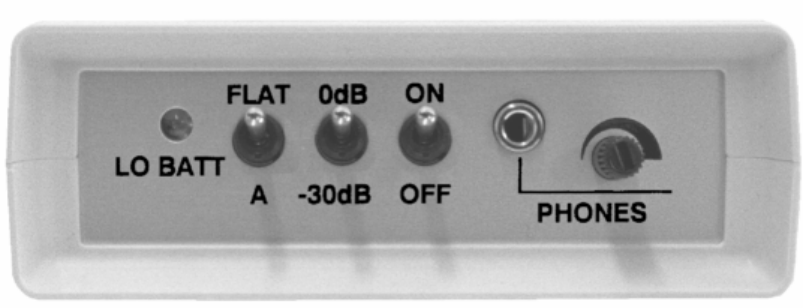
4. Frequency response



- Discrete tones from CD or signal generator
- Read the results 1-3 meters from the loop wire
- **Note: High frequency drop is common due to metal losses (reinforced concret). Measurement below 1 kHz could is not valid for many amplifiers due to AGC-regulation.**
- **Important: The high frequency drop varies in different places. That variation can not be compencated by any controls at the amplifier. The distribution pattern can only be changed by using the SLS-Super Loop System or changing loop wire position**

5. Level check

1. Start Artificial Speech, track 1 on CD
2. Make certain that at least one short peak reaches +400 mA/m (±3dB)



Verifying the system (the most important basic measurement)

1. **Connect the actual signal source**
2. **Adjust the input level**
3. **Adjust the ouput current**
4. **Some short peaks should reach 400mA/m (±3dB)**