OPERA™ Audio Quality Analysis – Your Digital Ear.

OPERA™ Audio Quality Testing employs PEAQ, the powerful and advanced sound quality assessment algorithm that models human perception by a computer model of the ear. You can test the audio quality of low bit-rate coded music signals, such as MP3, AAC, AC3 and MS Audio with true music signals. PEAQ directly relates to the customer's perception of quality, thus saving a long series of subjective listening tests.

OPTICOM's significantly advanced version of PEAQ not only reports the standardized result values, but gives codec, chip and equipment developers a lot of views and details for problem analysis.

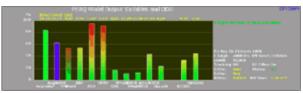**The comprehensive algorithm set for high-quality wide-band audio testing includes:**

> Wide-band Audio Quality Measures (optionally available for the software-only and all hardware configurations)

- **PEAQ**, the new international standard for perceptual evaluation of high-quality wide-band audio signals according to **ITU-R rec. BS.1387** [1999], developed by an international consortium of leading sound quality experts under co-authorship of OPTICOM. Measures **ODG** (comparable to MOS) and reports detailed **Model Output Values** (MOVs).

click to [enlarge picture]

- **PEAQ**
  Basic Model Analysis in **real time*** and **PEAQ Advanced Model** available, based on advanced ITU reference source code [*real time analysis requires OPERA Analyzer OPR-12x-EAQ-P; not supported in software-only versions]

- **48** kHz (ITU standard rate) and OPTICOM advanced **44.1 kHz** sampling rates supported

> Competitive Strength for future Standards

Due to OPERA's flexible design, user defined algorithms and advances in measurement standards can easily be provided as software plug-ins, ensuring OPTICOM's very competitive and short time-to-market.

> Common Features for Audio Quality Analysis

- Plenty of detailed views and graphs provided for further analysis, incl. PEAQ Model Output Values as numerical and graphical representation, time signals, linear and logarithmic spectra, excitation on Bark scale, perceived quality over time, delay measurement

- Result logging functionality, including user definable log intervals and quality score threshold

- Trigger functionality for targeted analysis of on-line or long duration test signals (e.g. during continuous broadcast monitoring)

- Interactive or automated unattended measurements,

batch measurements by comprehensive scripting interface

> PEAQ Applications and Features

- Audio Quality evaluation of non-linear systems, including low bit-rate codecs such as MP3, MP3pro, AAC, AACpro, DOLBY AC3 and Microsoft Windows Media

- End-to-end wide band audio quality testing of terrestrial and satellite broadcast networks, e.g. of FM, DAB, DVB

- On-line monitoring of broadcast networks from the studio source to the receiver

> Downloads

-> Download **OPERA brochure** [as PDF / 1,1 MB]

-> Download **OPERA data sheet** [as PDF/ 823 kb]

-> Download **printable version of this page** [as PDF / k

> More details

For further information on "PEAQ – Perceptual Evaluation of Audio Quality" refer to our Literature information

For more details on the technology of Audio Quality Testing refer to our Technology section or visit www.peaq.org

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