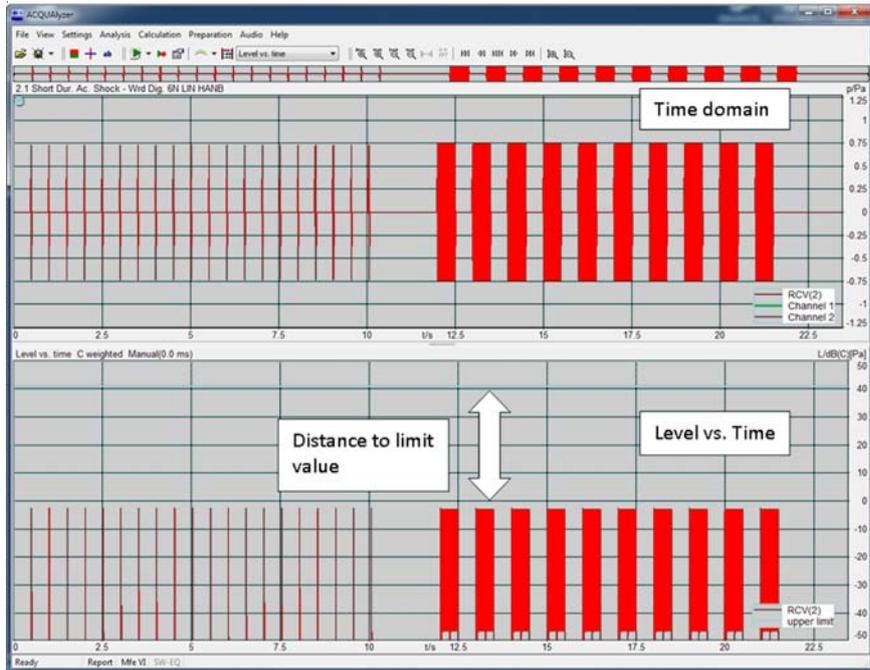


DATA SHEET

EG 202 518 (Code 60004)

Maximum Levels and Test Methodology



Example: Short Duration Acoustic Shock Measurement Result

Overview

ETSI (European Telecommunications Standards Institute) determines procedures for measuring acoustic exposure from handset and headset terminal equipment in the standard EG 202 518. Moreover, the standard specifies the maximum levels required to protect users' hearing by avoiding exposure to acoustic pressure levels in excess of the limits set out in Directive 2003/10/EC of the European Parliament and Council.

Therefore, conformance with EG 202 518 can help safeguard equipment providers against the increasing number of law suits regarding compensation claims for hearing defects caused by acoustic shock.

EG 202 518 has been implemented into a test suite for the communication analysis system ACQUA* by HEAD acoustics.

This data sheet gives an overview of the test signals, equalizations and measurements implemented in the standard as well as the necessary system requirements.

(*requires ACQUA version 3.0 or later)

TEST SIGNALS

- Square wave sweeps and tone burst signals according to EG 202 518

EQUALIZATIONS

- Implemented for DF-average equalization according to P.58 (MFE equalization not required)
- Alternatively: implemented for DRP/ERP-correction as distinct SMDs

MEASUREMENTS

- Analogue peak sound pressure test
- Analogue long duration disturbance test
- Digital short duration disturbance test
- Digital long duration disturbance test

Note: Digital handset / headset measurements implemented for Wideband (G.722) and Narrowband (G.711)

SYSTEM REQUIREMENTS

EG 202 518 requires the following system components:

- **ACQUA** Communication Analysis System as one of the following versions (version 3.0.100 or later):
 - Full-licence (Code 6810)
 - Workplace (Code 6830, for post-analysis and documentation only)
 - Compact Systems (Code 6860.xx)

Depending on the test case, various other components are required, as shown in Table 1 (cf. below).

Note: Type 3.3 artificial ear is recommended for all types of terminals. Type 3.4 artificial ear is recommended for all types of terminals except supra-concha and supra-aural headsets. For intra-concha headsets type 3.4 ear may be used only if the acoustic outlets face the ear canal.

DELIVERY ITEMS

- **EG 202 518** (Code 60004): Measurement standard, delivered as ACQUA 3 database on CD
- **V2C file** on CD
- **Manual** as PDF on CD

Part	Description	Hardware Requirements
Digital	Handset, Headset, Narrowband (G.711), Wideband (G.722)	Use-case independent: HMS II.3 (+ HHP III) Depending on use-case: A. VOIP tests MFE VIII + MFE VI.1 B. CAT-iq 2.0 Portable Part tests MFE X + MFE VI.1 C. CAT-iq 2.0 Portable Part and Fixed Part Bundle tests MFE VIII + MFE VI.1
Analogue	Handset, Headset	Artificial Head HMS II.3 + HHP III MFE III 10/700 µs Surge Generator according to IEC 61000-4-5 (not available from HEAD acoustics).

Table 1: Additional system requirements depending on standard parts

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