

## HASQUE

-Real Time Listening Test Simulator-

## Getting Started

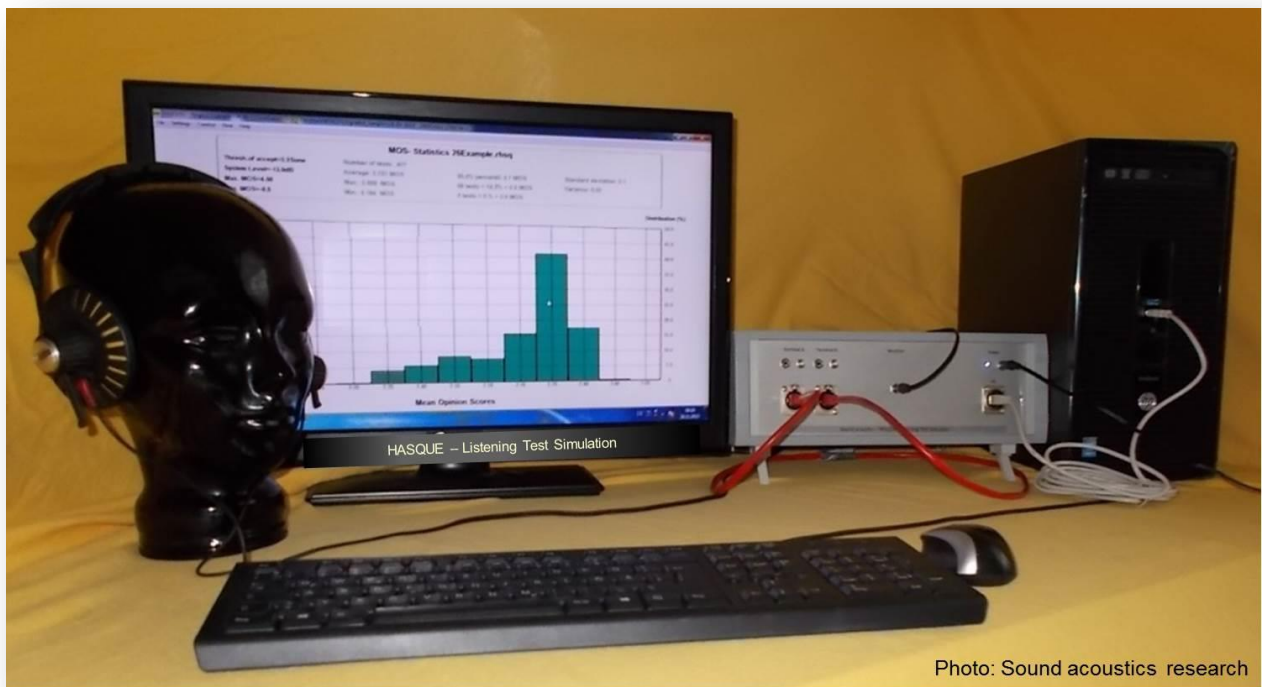


Photo: Sound acoustics research

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## Intended Use:

HASQUER (**H**earing **A**dequate **Q**uality **E**valuation for real time) is a real time listening test simulator with two bi directional symmetric analogue interfaces for speech quality evaluation.

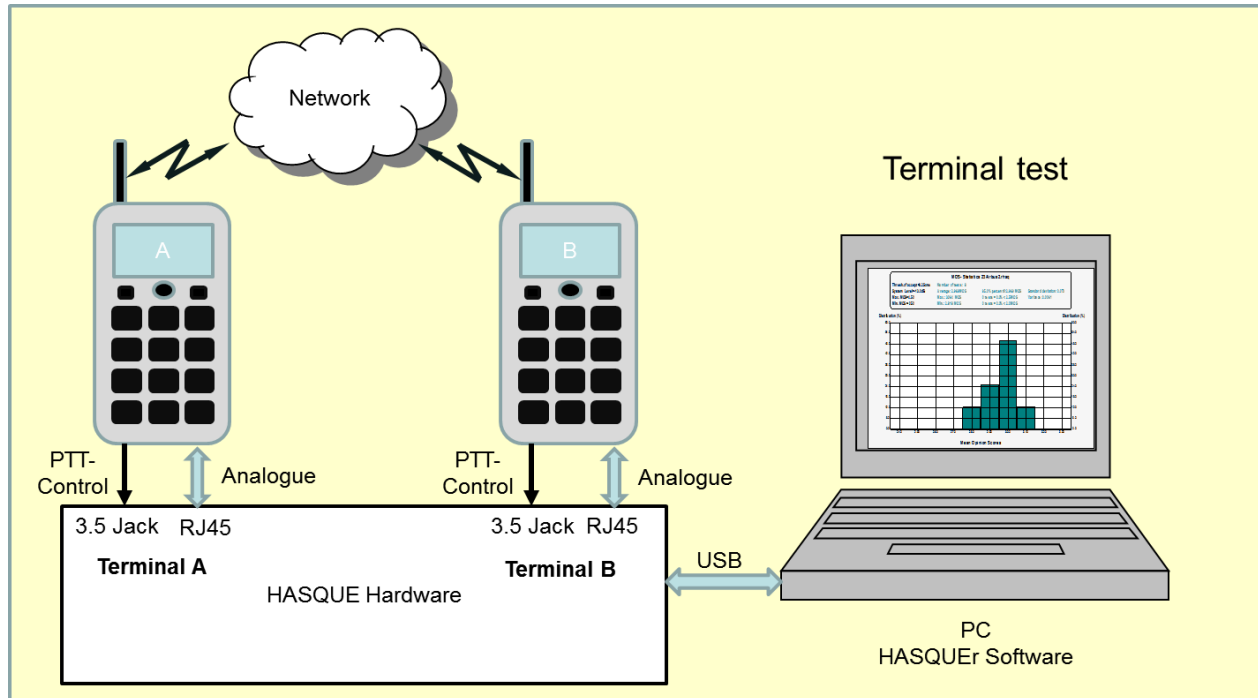


Figure 1: System arrangement for terminal tests

HASQUER is consisting of high quality analog to digital converters with 24 Bit resolution operating at 48 kHz sample rate.

The quality evaluation is based on the HASQUE® principle which compares the output signal with the input signal of the system under test by hearing adequate functions in the digital sampled domain. The quality measure indicates the objective **Mean Opinion Scores** according to ITU standards on the five point MOS scale with Excellent = 5, Good = 4, Fair = 3, Poor = 2 and Bad = 1. The HASQUE principle takes individual frame conditions of an application (MOS scaling and range, wideband, narrowband, listening loudness and the threshold of acceptance) into account and hence can be adapted to a large field of applications.

The preset of the listening test frame conditions is determined for narrowband evaluation (300...3400Hz) and correct scaling of the MOS range between -0.5 and +4.5, following the scale of the ITU-T P.862 recommendation.

Detailed information is available in the online help of the HASQUE software.

## Getting started:

1. Download the setup program for your purchased HASQUE product from the customer download area, [www.sound-acoustics.eu](http://www.sound-acoustics.eu) "Downloads". The installation programs are designed for Windows operating systems (W7...W10).
  - a. Select the right setup program HASQUEx (x stands for r, r\_p or w dependent on the ordered product) with the right mouse button and select „Save as“ or „Save file“ onto the local memory disc of our PC
  - b. Extract there all files with the password you received from Sound acoustics and start the extracted installation program.
2. The measurement system starts automatically with the last installation step. As this is the first time you start HASQUEx, a "Husky" wizard opens and leads through necessary steps for the installation of needed hardware drivers, asks to carry out necessary settings, prepares add on features or creates reference files for any add on license as e.g. for PESQ if desired.
3. A first functional real time test can be carried out with the aid of the menu item "Control/Start Hardware Test" or short Ctrl+Alt+F5. This test should be carried out with a RJ45 loop cable between terminal A and B according to figure 2 and is useful to prove the functionality of the HASQUE measurement system interfaces.

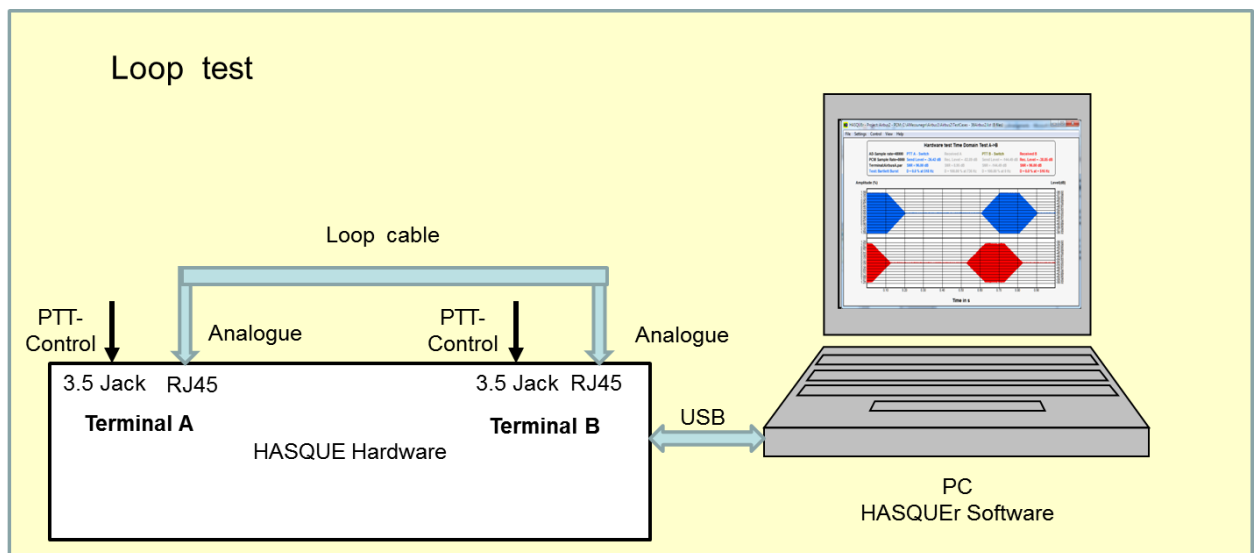


Figure 3: Loop test

4. HASQUE products can be started after installation providing a limited set of functions. A real evaluation of test cases requires however a license key. Any program start without license key opens a registration dialog box asking for the license key. Please copy the indicated reference number and send this number to [contact@sound-acoustics.eu](mailto:contact@sound-acoustics.eu).
5. You will receive license keys from Sound acoustics research against provided reference numbers to be copied into the corresponding edit window of the registration dialog box.

The HASQUE program includes an online help, which can be accessed with pressing the F1 key. In any case we are to your disposal, if you need support. In this case don't hesitate to contact [help@sound-acoustics.eu](mailto:help@sound-acoustics.eu).

## HASQUE Hardware interfaces:



1	3.5 mm Jack	PTT control cable to terminal A or B
2	PTT key	manual PTT control
3	RJ45 Audio Port	symmetric bidirectional analogue audio signals
4	3.5 mm Jack	monitor output to headphones
5	Power supply jack	Power supply
6	USB2.0 Port	USB connection to PC

## Literature:

1. Sound acoustics Literatur: [HASQUE](#)