Documentation Module (DOC) S17

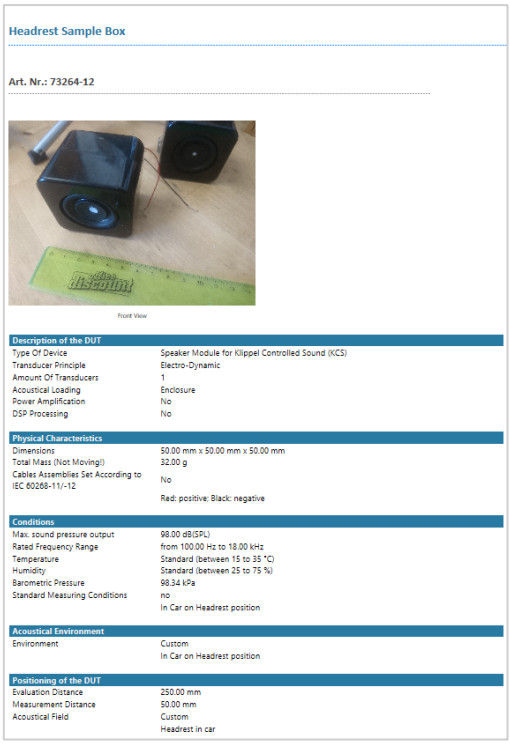
Module of the KLIPPEL ANALYZER SYSTEM (Document Revision 1.0)

FEATURES

- Test documentation according to IEC 60268 standards
- Insert pictures
- Save data sheets (e.g. PDF) in database
- Make instructions for test execution

BENEFITS

- Traceable test conditions
- Include instruction and / or documentation next to test operation
- Store related documents in one database
- Exchange data and description by just one kdbx file



Headrest Sample Box

Art. Nr.: 73264-12

Front View

Description of the DUT	
Type Of Device	Speaker Module for Klippel Controlled Sound (KCS)
Transducer Principle	Electro-Dynamic
Amount Of Transducers	1
Acoustical Loading	Enclosure
Power Amplification	No
DSP Processing	No

Physical Characteristics	
Dimensions	50.00 mm x 50.00 mm x 50.00 mm
Total Mass (Not Moving!)	32.00 g
Cables Assemblies Set According to IEC 60268-11/-12	No Red: positive; Black: negative

Conditions	
Max. sound pressure output	98.00 dB(SPL)
Rated Frequency Range	from 100.00 Hz to 18.00 kHz
Temperature	Standard (between 15 to 35 °C)
Humidity	Standard (between 25 to 75 %)
Barometric Pressure	98.34 kPa
Standard Measuring Conditions	no In Car on Headrest position

Acoustical Environment	
Environment	Custom In Car on Headrest position

Positioning of the DUT	
Evaluation Distance	250.00 mm
Measurement Distance	50.00 mm
Acoustical Field	Custom Headrest in car

DESCRIPTION

The Documentation (DOC) module complements the measurement and simulation modules of the Klippel Analyzer system. It has 3 basic functions:

- Documentation according to IEC 60268-5, 21 and 22 with pre-defined attributes. User defined templates can be used to meet company specific extent of attributes, that need to be stated.
- Use instruction or documentation files using user defined style and content (HTML, HTM, TXT, PNG, JPG). In this mode arbitrary formats and styles together with any HTML element are supported.
- Attachments: Storing documents (any file type) to be kept in database for easy and comprehensive exchange of test results with related information. The DOC module acts like a container for those files. They are not visualized nor interpreted, they can be simply stored to and fetched from a database.

CONTENT

1 Overview

1.1 Principle

This module simply describes tests and can be used to store related documents. It does not measure itself.

1.2 Results

An HTML chart *Documentation* shows the compiled documentation or the user defined HTML file resp. Reports and PDF output can be created using the dB-Lab report generator.

Reports on object level (combining multiple operations) may be used to combine the output of the DOC module with actual test results of other operations.

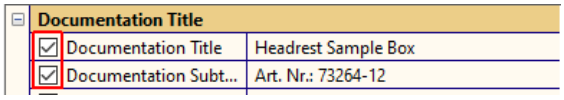
2 Examples

2.1 IEC conform documentation of operations

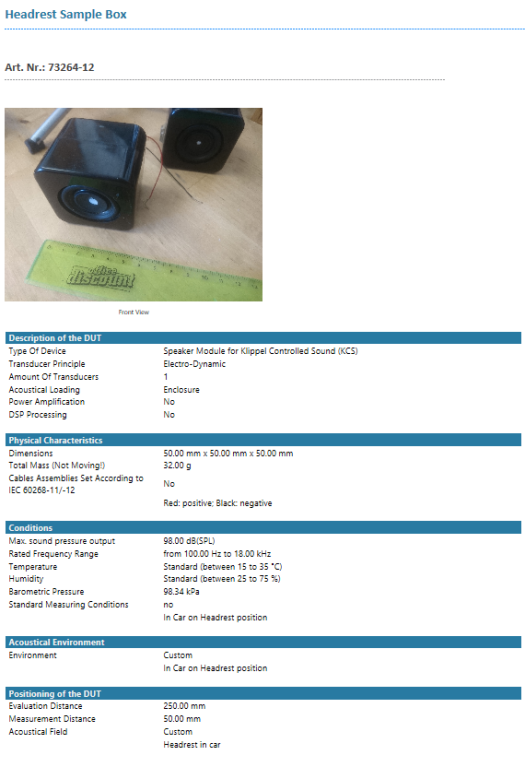
This module can be used to add meta information and conditions to test operations. In this case, simply add it to a test, the same or similar name is recommended.

It can also be used to describe a whole set of operations or a test sequence, which are typically executed as a batch.

DOC module fully supports IEC 60268 – 5, 21, 22 standards and allows a comprehensive description required in those standards. Since many items are required which not all may be useful in a particular application, individual items as well as complete sections can be disabled. Thus, they do not need to be filled out and are not included in the output.



Several types of pictures can be included to illustrate the test object as well as test conditions. The style in this mode is fixed.



2.2 User defined documentation file

Any styles and customer specific formats can be applied in *User defined HTML* mode. Plain TXT or plain text HTML or HTM code as well as *PNG* and *JPG* can be loaded into the DOC module. The original style is kept.

This mode can be used to add documentation differing from IEC standard, such as company specific style sheets and content.

It can be also used for instructions how to perform tests, how to interpret results, how to assemble or mount product before or after measurement.

Instruction for Sub-Woofer Assembly 342-34 Pro

Step 1: Preparation: Make sure all elements are available

Step 2: Mount the Amp

Mount the sub component into the rear panel using 4 x M4 screws

Step 3: Add the Acoustic Foam

Use glue type XYZ-ABC to fix it

Step 4: Install the Driver

Be careful when mounting, use 8 x round head wood screw

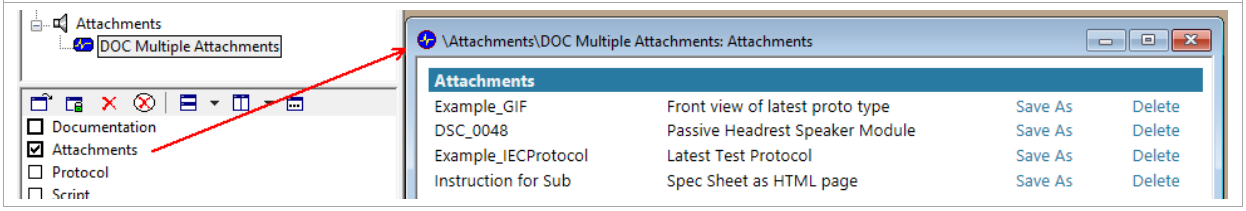
Step5: Adjust filter settings to target

Use Klippel Tansfer Function Module (next to this DOC module) to measure the response in 1m distance. Put the sub woofer on the floor in a large room or outside on solid ground. Adjust the filter settings to match the specified target response.

2.3 Storing related files

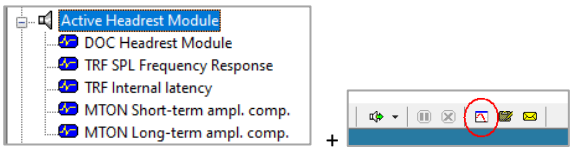
In addition to documentation external files may be added to a Klippel test database (**.kdbx*) using the DOC module. Files may simply be specified and loaded into the operation and are listed in chart *Attachments*. Using *Save As* and *Delete* options in this chart, such files can be extracted and/or deleted at any time.

Typical use cases are adding data sheets, pictures, instructions, bill of material, and calculations.

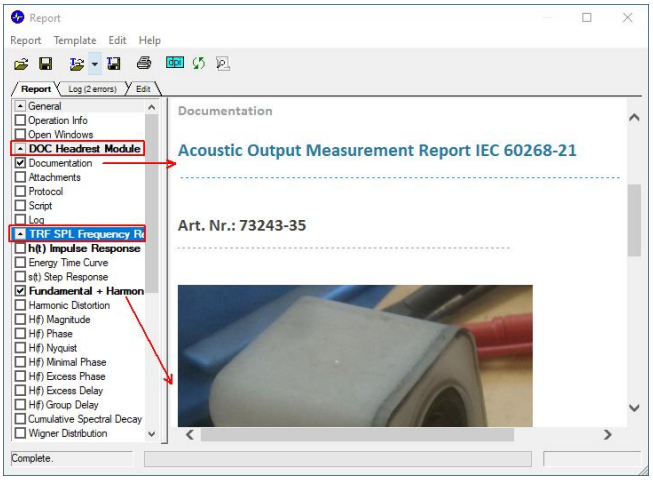


2.4 Application for objects (multiple operations)

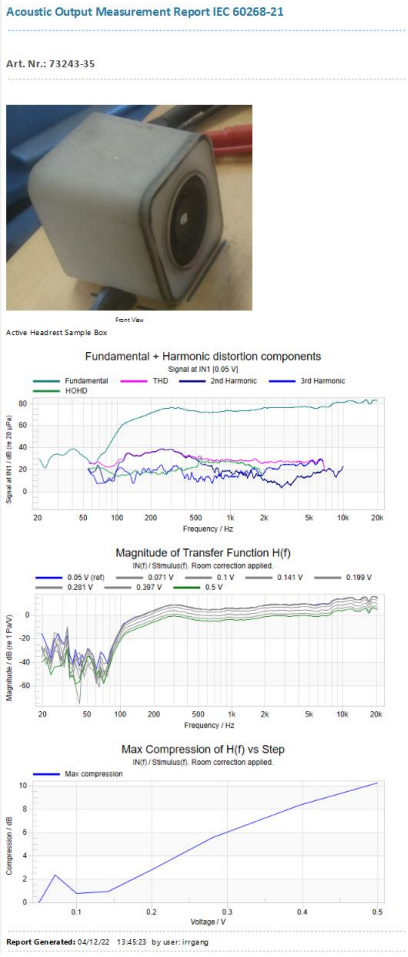
Using the report generator built in dB-Lab the output of the DOC module can easily be combined with test results. This example uses the compiled documentation from the DOC module, and the most important result charts from TRF and MTON operations. Select the object and press the report generator icon to open it:



Select the charts of interest and store, print or save it as report template for further use.



Using report templates customer specific information or styles, logos etc. can be applied. See dB-Lab manual for more details.



3 Requirements

3.1 Hardware

	None, no dongle required

3.2 Software

	dB-Lab 212.300 and higher, no license

4 Limitations

4.1 Documentation File

Interactive HTML elements are not officially supported. It is not guaranteed they are functional in a generated HTML report.

4.2 Attachments
Size of attachments is restricted to max. 100 MByte per file. The number of files to be attached is not limited.

5 Setup

Editable Documentation	Any item can be enabled / disabled and therefore selected to be used in the generated report using the engineer mode. The operator mode prohibits changing the enabled / disabled state of an item and is recommended to be used when filling in the Editable Documentation. It is highly recommended to store templates of the company specific extent of documentation for general measurements. Pictures of the following types are supported: gif, jpg, jpeg, png
Documentation File	A user defined plain text HTML or HTM, plain TXT, JPG and PNG file can be specified which is shown in chart *Documentation*. MHT or MHTML file format is recommended to be used since it is embedding pictures and other linked material into one single file.
Attachments	Files can be added, saved and deleted. Such files are neither visualized nor interpreted.

6 Results

Editable Documentation	HTML output is compiled from user defined input including pictures and shown in chart *Documentation.*
Documentation File	The user defined file is shown in chart *Documentation*.
Attachments	Attached files are stored in the database. When exchanging the kdbx files, attachments are included and files can be extracted.

7 References

7.1 Related Modules	Klippel Analyzer Frame Software dB-Lab
7.2 Manuals	DOC User Manual dB-Lab Manual
7.3 Publications	IEC 60268-5: Sound system equipment – Loudspeakers IEC 60268-21: Sound system equipment – Acoustical (output-based) measurements IEC 60268-22: Sound system equipment – Electrical and mechanical measurements on transducers See Klippel Website for more information on Standards

Find explanations for symbols at:

http://www.klippel.de/know-how/literature.html

Last updated: April 23, 2024

Designs and specifications are subject to change without notice due to modifications or improvements.