

### **DATA SHEET**



ArtemiS SUITE PRoject

Code 50500

# APR 500 Jury Testing - SQala Basic

Jury Testing - SQala Basic of ArtemiS SUITE is the core of the modular SQala software. APR 500 can be used to create listening tests scenarios and to perform them as Local Sessions. For performing listening tests in listening studios and Distributed Sessions, ASP 501 and ASP 502 are available.

# OVERVIEW

## APR 500 Jury Testing -SQala Basic

#### Code 50500

Jury Testing - SQala Basic is the basis of SQala and enables the creation of suitable listening test scenarios. The set up of listening tests is intuitive and no expert knowledge is required. Therefore, the project provides a modern, clearly arranged page layout, which makes it easy to create both simple and complex listening tests in a very short time. The listening tests can be customized, saved, and re-used as needed for various listening test scenarios.

By using SQala for listening tests, the time and effort for conducting and evaluating the tests can be significantly reduced. Furthermore, performing the listening tests in parallel with the product development process can provide additional potential for time savings.



## **KEY FEATURES**

Creating listening tests and performing the test with single participants

- > Straightforward, intuitive user interface
- Fast creation of complex listening tests without expert knowledge
- > Modern, functional page design
- > Custom design options
- Performing various types of listening tests:
  - Ranking
  - Paired Comparison
  - > Multi-Attribute Paired Comparison
  - > Semantic Differential
  - Category Judgment
  - Simultaneous Category Judgment

Listening tests scenarios:

- > SQala Local Sessions (for a single participant)
- ASP 501 and ASP 502 are required for:
  - Listening Studios
  - Distributed Sessions (distributed single-place systems or even listening places in a listening studio that can participate in a session at any time)

Software and hardware solutions for preprocessing and postprocessing tasks and playback are available

### **APPLICATIONS**

- Benchmarking
- Defining target sounds
- > Optimizing product sounds

# **SQALA SOLUTIONS**

#### LOCAL SESSIONS

#### JURY TESTING -SQALA BASIC (APR 500)

- > Creating listening tests
- Performing listening tests in Local Sessions for single participants
- For performing listening tests in listening studios and Distributed Sessions with multiple participants, the licenses of ASP 501 and ASP 502 are required

#### LISTENING STUDIOS AND DISTRIBUTED SESSIONS

#### JURY TESTING -SQALA NET (ASP 501)

- Performing listening tests (Individual Mode or Group Mode) for multiple participants
- SQala Session Administration for supervision and management
- SQala Server Manager for managing and providing listening tests provided on a SQala Server
- Establishing the connection between the SQala Server and the individual SQala Clients (participants)

#### JURY TESTING -SQALA SERVER (ASP 502)

- > SQala Server
- For performing the SQala Net (ASP 501) listening tests, the ASP 502 license is required

#### **JURY TESTING - SQALA CLIENT**

- For performing listening tests in Distributed Sessions or listening studios, SQala Client must be installed on each listening place (PC, tablet, etc.)
- > No license is required

#### **STUDIO CONTROL**

- Configuring playback devices from HEAD acoustics in listening studios
- > The license of APR 110 is required



#### **ADDITIONAL SOLUTIONS FROM HEAD ACOUSTICS**

#### TOOLS FOR PREPROCESSING AND POST-PROCESSING

- Projects for performing the analyses and other tools
  - > APR 010, APR 050, APR 570, APR 220
- > Psychoacoustic and other analyses
  - > ASP 305, APR 110
  - ASP 101, ASP 102, ASP 103, ASP 104, ASP 001, ASP 002, ASP 004, ASP 006, ASP 007, ASP 201, ASP 202
- > Other processing tools
  - > APR 200, APR 210, ASP 305



#### BINAURAL AURALLY-ACCURATE PLAYBACK

- HEAD*lab* playback modules
  - JabP2 (Code 3732)
  - > labP2-V1 (Code 3732-V1)
  - > labO2-V1 (Code 3731-V1)
- Headphones recommended by HEAD acoustics
- > Loudspeakers
  - HPL (Code 2968)
     2 x High Precision Loudspeaker
  - HSW I (Code 2950)
     HEAD subwoofer



#### SOUND QUALITY INDEX

> Metric Project (APR 570)



#### ASX 03 – SQALA EXTENSION API (CODE 5093)

 Programming interface for programming new customized SQala test steps

F Descharge States	CATEGORY RATING REFERENCE STEP RESULT	
Integration Paint	CONVERTER	
hope	<ul> <li>In order to proved results of an extension way into Each hereat, similar to have internal sings are handled during</li></ul>	
worghs	Conversion to DataTable	
Entrancing with Reference imp	* For conversion, the featurement will present all gene results, the effortunit cartiaring the axed configuration, and environment cartiaring the relevant scientification, to relative, a DRUMatter resolution provided.	
Patters Sea	(c) bolds in children disense disense in a set, disent reduction in a disent minimum (c) cond).	
Star Denty	Using the efforts of the configuration can be described and the name of the reference scandiscs be vibles of	
Shar Sarfig Kitter Shar Sarfig Kitter Year Dag Nasak Sarawkar Jang Nasa	$\infty$ and $\infty$ installing unit limited $g_1$ is the solution of	
	have the marries of wave and estimate for the Data/falls are determined and matching arrays are initialized.	

# DETAILS

#### Jury Testing - SQala Basic

#### **CREATING LISTENING TESTS**

For the quick creation of a complete listening test, SQala Basic provides a unified, functional page layout. Users can create custom combinations of the desired listening test types, thus intuitively assembling their listening tests step by step. No expert knowledge is required thanks to the straightforward, easy-to-use interface. This enables even large listening tests with several test steps to be created quickly and safely.

#### **TEST STEPS**

Several predefined test steps are available, so that users can compose their customized listening tests with a few clicks:

- Information
  - This test step may include instruction to participants or other information
- Sound Demo
  - Sound Demo can be used for the demonstration of extreme sounds or the complete range of the sounds, for example
- Types of listening tests
  - Ranking
  - > Paired Comparison
  - > Multi-Attribute Paired Comparison
  - Semantic Differential
  - Category Judgment
  - Simultaneous Category Judgment
- Interview
  - This test step can be used to request information that participants can or optionally must provide during the execution of the listening test

With the programming interface SQala Extension API (ASX 03), users can extend their listening tests with individual test steps and include them seamlessly.



To select a suitable layout, users can choose their step types from various pages and customize it further.

A		ArtemiS SUITE			
ft Edit View User Documentation	Documents Help				•
🚖 🚟 🔛 🔛 💼 🔶 Export to	<u>∽</u> />   X 🗅 🖮 🖾 ×   ⊙ 🗐 🕨		🚺 Worki	oook = 🛄   🔎 Search D	ocumentation •
SQala Project.hsp ×     Sound Attribu @ Steps (8	) Preview from Beginning Preview from	Current		roperties tribute Project	+ ×
+ Predefined 🖪 New				Header	
Configure 1 Speech     Configure     Configure     Configure     Configure     Configure     Configure     Configure     Configure     Configure	Inter Predefined Attribute:           Inter         Nonre           Inter         Nonre           Interview)         Solo State           Interview)         Solo State           Interview)         Solo State           Interview)         Solo State           Sound Caulty         Solo State           Sound Caulty         Solo State           Quality of Speech         DU State	Tellur (Col + 7)           Stor, sliphty, faity, quite, very)           Stor, sliphty, faity, quite, very)           Stor, stal, sliphty, quite, very)           Stor, stal, sliphty, quite, very)           Stor, stal, sliphty, quite, very per per, per, 7 mandate, very std, std, restlim, per           Stor, greed, question)	extremely) vays) kely, for s marginal,	Show Progress Indicator	
		<u>QK</u> <u>Cancel</u>	Insert		

Various options are available for a quick configuration of the rating attributes. Manual editing is possible as well.



Test steps

#### PREVIEW

The preview always displays the current state of the listening test exactly like a participant would see it. This applies both to the scope and the layout of the pages.

#### **EXECUTION IN LOCAL MODE**

Users can execute a completed SQala listening test locally. This enables users to perform listening tests successively with several participants, too.

#### Creating new customized test steps – SQala Extension API (ASX 03)

The programming interface ASX 03 of ArtemiS SUITE enables users to design own test steps and to include them in a SQala listening test. The implementation of the new user-specific testing procedures is seamless and customized to the SQala design. For creating consistent overall impression, the same control options are available for the new and the standard test steps.

Programming new test steps with ASX 03 is very simple. Users get a detailed documentation with various examples, practical model applications, and programming references.

The realization of jury tests with individual test designs is possible in the local mode, but not in Listening Studios or Distributed Sessions for the time being.

## Evaluating SQala test results for a sound quality index

XML result files from a SQala Project can be included in a Metric Project (APR 570 is required) directly. Users may select for which rating (step and attribute) of a SQala Project of the types Category Judgment, Semantic Differential, and Simultaneous Category Judgment the metric shall be calculated.

The close connection between SQala and the Metric Project enables users to map results of time-consuming and costly listening tests by reproducible analysis results that can be determined using measurement technology.

SQala Client		
SQala Door Closing Sounds		<b>0-0-0-0-0</b> -0-®-®-®-®-®-®-®-®-®-®-®-®-®-®-®-®-®-®
	Please rate the door closing sounds regarding the following attributes.	
	Car1	
very soft		very loud
not tonal		exremely tonal
blunt		sharp
extremely good	extremely good good acceptable bad extremely bad	extremely bad
	1/3 >	



A ArtemiS SUITE	X
↑     [£4] Xerr & Surrelation: Economics       ★     □       ↓	😧 🕼 Workbook - 🖽 🛛 🖉 Search Documentation
SQala Sound Demonstration	<b>0-0-</b> 0-0-0-0-0-0-0-0-
These sounds represent the range of all sounds used in this list $\left( \begin{array}{c} & & \\ & & \\ & & \end{array} \right)^{1}$ $\left( \begin{array}{c} & & \\ & & \end{array} \right)^{2}$ $\left( \begin{array}{c} & & \\ & & \end{array} \right)^{3}$	tening test.
	Saxe 1200 x 6/5 .;!

Sound demo in local mode.

a sais cliere I-1 SQala Interview	×
Please answer so	ome questions regarding your person.
Ves Ves Ves Ves Ves	<ul> <li>№</li> <li>№</li> </ul>
Iterview 1900kolor 1900kolor	
- Ardonin	
Reste nick the presented sounds regarding their purceived loudness.	

Example of a test step: Ranking.

Further ArtemiS SUITE solutions

If needed, ArtemiS SUITE provides several tools (APRs and ASPs) for generating, editing, or merging signals as well as for performing analyses, statistical operations, filters, single values, signal cuttings, etc.

- Preprocessing
  - HDF Tools (APR 200) for sorting, concatenating, and merging signals
  - Signal Generator Project (APR 210) for generating artificial and other signals
  - › ...
- > Postprocessing
  - Psychoacoustic analyses
     (ASP 101, ASP 102, ASP 103, ASP 104)
  - Other analyses
     (ASP 001, ASP 002, ASP 004, ASP 006, ASP 007, ASP 201, ASP 202)
  - › ...
- > ArtemiS SUITE projects for performing the tools
  - > Pool Project (APR 010)
  - > Automation Project (APR 050)
  - > Standardized Test Project (APR 220)
  - > Metric Project (APR 570)

## Binaural aurally-accurate playback devices from HEAD acoustics

The combination of headphones recommended by HEAD acoustics with the appropriate playback systems and the correct equalizations enable an aurally-accurate playback for a reliable sound evaluation and optimization. To achieve this, HEAD acoustics provides several playback modules and equalized headphones from a hand that perfectly match SQala.



Example: Simultaneous Category Judgment.



Using the playback module labP2, for example, the original sound spectrum and the spatial distribution of the sound field can be reproduced accurately. labP2 can be cascaded and is the ideal device for the use in listening studios, too.

Required: APR 000 Framework (Code 50000)



#### **Contact Information**

Ebertstrasse 30a 52134 Herzogenrath, Germany Phone: +49 (0) 2407 577-0 E-Mail: sales@head-acoustics.com Website: www.head-acoustics.com