

HULTI-GEN v2.0 - Quickstart Guide

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Creating a new test

HULTI-GEN provides a step-by-step, test creation setup assistant. This assistant guides you through selecting a test method appropriate for your experiment, setting the parameters for your chosen method, customising the interface¹, adding stimuli, and assigning the stimuli into sessions and groups.

From the main menu, click the 'Create' button to create a new test and begin the setup assistant.

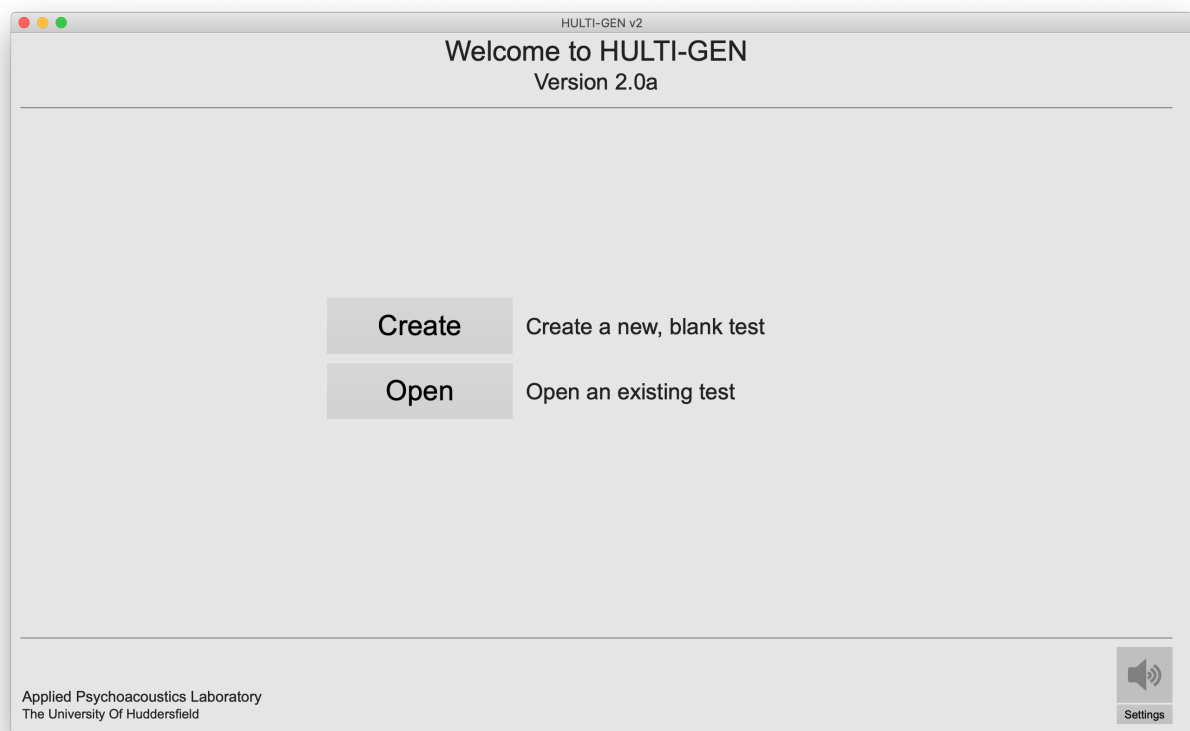


Figure 1.1: Click on the 'Create' button to begin the test setup assistant.

On each step of the setup process, you will be greeted by settings or options for that step. Once you have completed a step, click on the 'Next' button to move onto the next step.

¹Currently only available for grading tests

1.1 Step 1 - Choose a test method

When you begin creating a new test, you will be asked what kind of test method, or task, you want subjects to perform, see Figure 1.2.

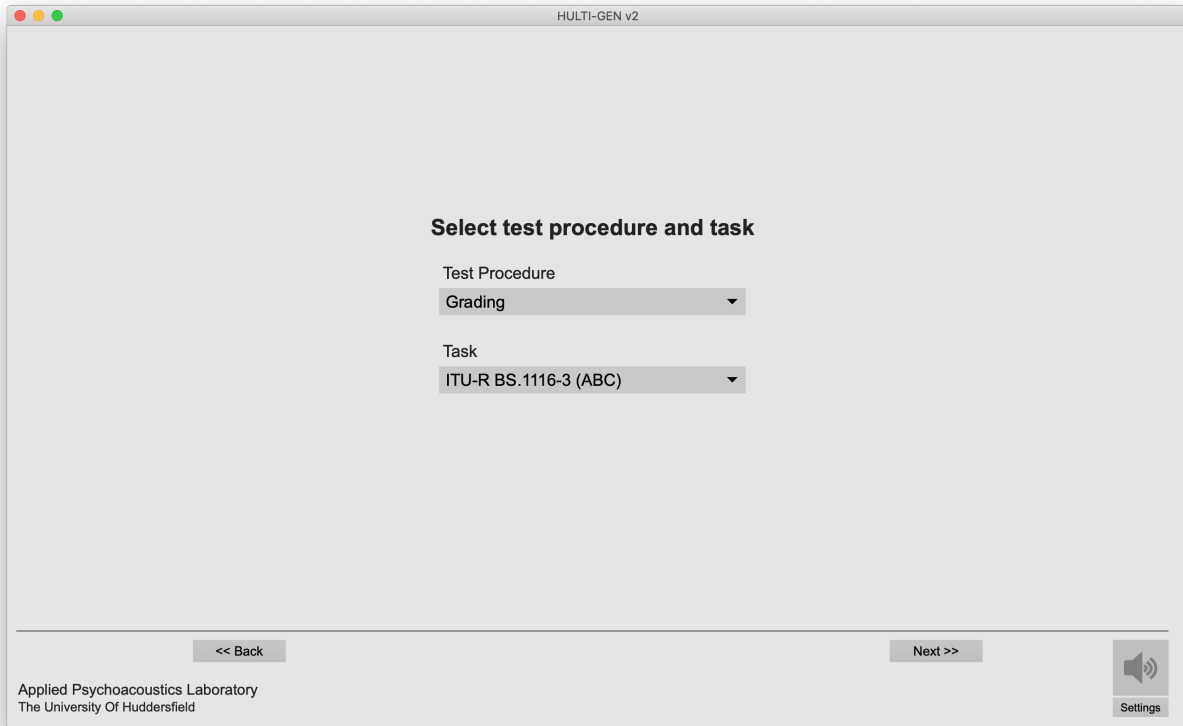


Figure 1.2: Choose what type of procedure and task from the on-screen drop-down menus.

Each test method available in HULTI-GEN is grouped by *Procedure* and *Task*. Procedure groups each task by its testing process. Task is specific task the subjects will carry out during the experiment, e.g. MUSHRA. The following table lists all available tasks grouped by their corresponding procedures. Once you have selected a task, click 'Next'.

Procedure	Task
Grading	ITU-R BS.1116-3 (ABC) ITU-R BS.1534-3 (MUSHRA) Bipolar ± 50 with reference ITU-T P.910 Absolute Category Rating (ACR) ITU-T P.800 Degradation Category Rating (DCR) ITU-T P.800 Comparison Category Rating (CCR) 9-Point Hedonic Scale
Non-Adaptive Psychophysical	Two-Alternative Forced-Choice (2AFC) ABX Signal Detection Theory 2AFC Signal Detection Theory ABX
Adaptive Psychophysical	Staircase 2AFC Staircase ABX

1.2 Step 2 - Input test parameters

On this screen you can set the number of sessions, or sittings, and groups of stimuli for the entire test.

Test parameters

Sessions

Number of groups of stimuli

Stimuli per trial

Number of Repetitions

Total trials per session

Use low anchor
☐

Use high anchor
☐

Objective

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Settings

Figure 1.3: Example test parameters screen.

The type settings that you will see are contextual, whereby they depend on the type of procedure that you are configuring. The following list of descriptions explain the settings common to all procedures.

Sessions The number of sittings a subject will undertake for the entire test

Number of groups of stimuli Sets the number of stimulus groups per session. In grading tests, this also sets the base number of trials.

Objective The instructions that the subject will be shown on screen during the test.

Warning: *If at any point in setup process the number of sessions / groups are changed after being set, assignment of stimuli to any now non-existent sessions / groups will be destroyed.*

1.3 Step 3 - Customise the test interface

In this step you are able to customise various aspects of the test interface². You can edit and resize the labels, change the scale minimum / maximum points and resolution, and (if enabled) position the high and low anchor buttons.

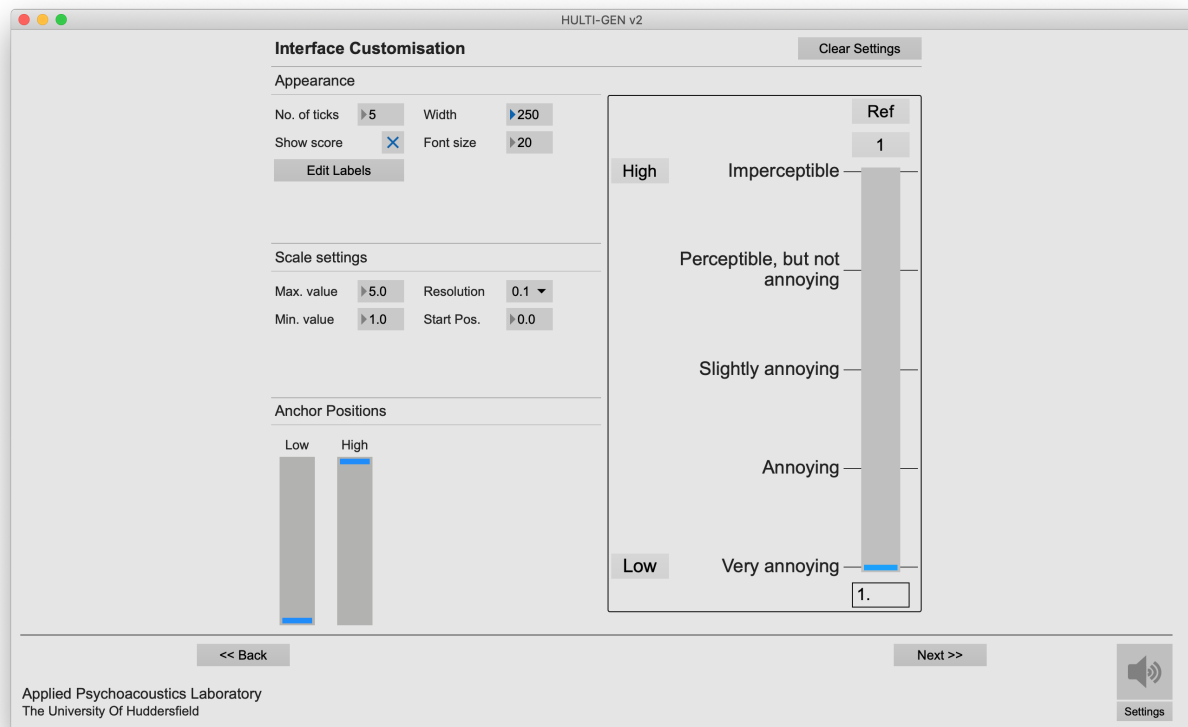


Figure 1.4: Customise the test interface to suit the needs of your experiment.

By default the interface is set to follow the recommendations for the chosen task. Therefore, customising the testing interface means you are working outside of the recommendation. This is not a discouragement, but a reminder that you should justify the design of your test interface where required. After all, the aim of HULTI-GEN is allow experimenters to invent and try new ideas.

²**Note:** The customisation step is currently only available for grading tasks. Customisation will be made possible for all built-in procedures and tasks in future updates to HULTI-GEN

1.4 Step 4 - Load stimuli

Now that the test parameters have been set, it is now time load stimuli. First, the stimuli need to be loaded into a *pool*, which is collection of all the stimuli used throughout the entire test.

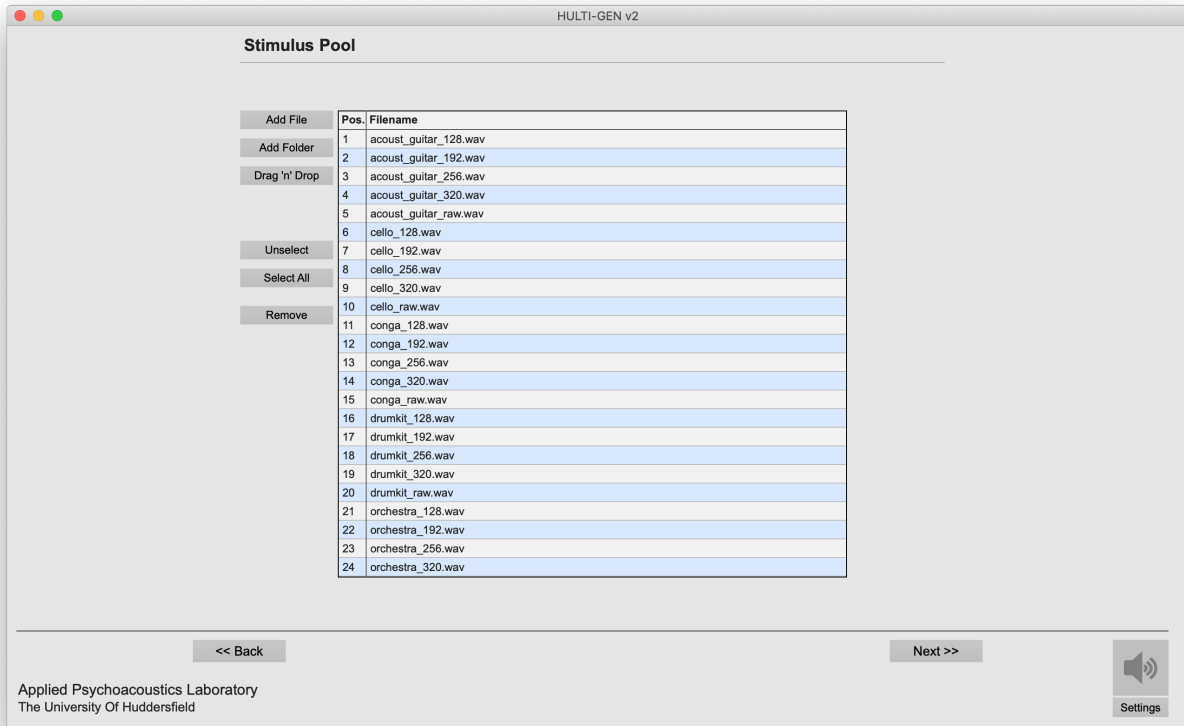


Figure 1.5: Stimuli for the entire test are loaded into a *pool* using this interface.

There are three main ways to add stimuli to the pool.

Add File Browse for and add individual files.

Add Folder Add an entire folder of files.

Drag 'n' Drop Enable the drag and drop feature of the file-list. When enabled, you can drag files directly onto the file-list, where they are then appended to the list.

As you load stimuli into the pool, their filenames are displayed in the file-list in the middle of the screen. Stimuli can be remove by first selecting items in the list, then click 'Remove'. You can select multiple items in the list by holding down 'Cmd' / 'Ctrl' (Operating System dependent) or 'Shift', much like the file browser built into your Operating System.

Running a test