

Exporting Recorded Data

using SmartTrOAE

Introduction

Certain users, specially researchers, may find that they need to export their data to a different program or format, for analysis or storage. SmartTrOAE data can be exported multiple ways.

Exporting a single response

While the patient file is loaded and the TrOAE recording is on the screen:

1. From the main menu, click on **[SHOW > SHOW STATISTICS]**.
2. A panel will open on the right-hand side of the screen, showing the information for the selected recording. If you wish to switch to another recording, simply click on its handle.
3. Click on the **[SAVE TO FILE]** button and select a location (folder) and filename for saving the exported data.

Note that exported files saved to the IHSEExportData folder will be automatically deleted after a 24 hours. To keep a copy of this file permanently, make sure save it outside this folder.

Data in the exported file includes:

- **Patient Information:** The patient identifier, patient name, and the ear tested.
- **Recording Information:** The recording file name, type of recording, stimulus intensity, stability measure, rate of presentation, number of sweeps, number of artifacts, signal gain, acquisition type, overall amplitude, overall noise, and artifact rejection value.
- **Screening Status:** Passing criteria results for screening and diagnostic.
- **Analysis bands:** Table of Frequency, Reproducibility, Response, Noise and SNR levels, passing status for each of the main test frequency bands, and passing status for the overall response.
- **FFT Breakdown:** Table of signal, noise, and response levels for each of the frequency bins in the FFT analysis. The width of the bin (width of the bands) is specified at the top of the list.

Exporting multiple responses

While the patient file is loaded and the one or more TrOAE recordings are on the screen, click on **[PROCESS > EXTRACT ALL DATA ON PAGE]** from the main menu.

Data in the exported file will be separated in rows, one per recording and includes the following columns: filename, number of sweeps, number of artifacts, overall cross-correlation, overall response level, overall noise level, band-specific cross-correlation, band-specific response level, band-specific noise level, band-specific signal-to-noise ratio. In addition, each row will include signal and noise values for each data point on the time domain waveform, as well as the A/D values for both the internal recording buffers.

Exporting suppression data

While in the suppression module, with all the required buffer recordings already loaded, click on the **[SAVE DATA]** button at the bottom-right of the screen.

The data in the exported file includes:

- Filenames of the recordings in each buffer
- Frequency data for the selected analysis point from the Power Spectrum graph
- Time data for the Amp Time domain plot, based on the selected start and end times. Including a Frequency Table and Time Table breakdown

Importing the Data

To import the data into Microsoft Excel®:

1. Open Excel® then click on **[FILE > OPEN]**.
2. Select the text file format in the "Files of Type" field; then locate and choose the text file with the exported data.
3. When the text import wizard opens, select "fixed width" and click on Finish.

Some versions of Excel may work differently. For the latest versions of Excel, the new import wizard may fail to import some of the data. To use the legacy import wizard, from the Excel Options, in the Data section, activate the legacy import wizard for text files. Then from the Data tab, choose **[GET DATA > LEGACY WIZARD > FROM TEXT]**, then choose the appropriate delimiter so that the data is formatted correctly.

Other spreadsheet programs may have similar import functions. Data may also be imported into MathWorks MATLAB® or other analysis software packages. For instructions about importing data into other programs please consult the user's manual for that program.