

Forensic Audio Workstation

SIS II



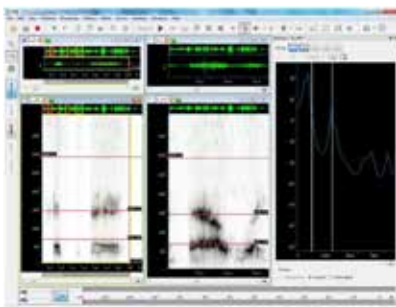
SIS II editor specialized audio includes a variety of effective tools and capabilities for processing and analysis of voice signals, which make it more manageable and easier criminal investigation.

Functions

- speech enhancement and audio restoration
- text transcription of low quality recordings
- speaker identification
- authenticity analysis of analog or digital audio records
- audio equipment testing and identification
- analysis of noises, acoustic environment and recording conditions.

Multi-window interface and signal comparison function.

- Signal overlaying
- Signal synchronization in time and spectral domains
- On-the-fly adjustments of visible speech for better clarity



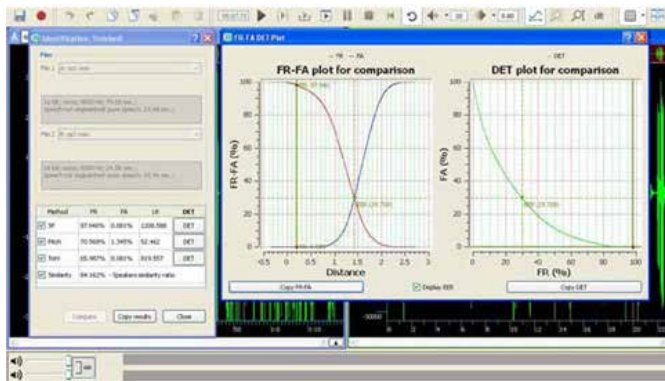
Audio analysis types

- Waveform
- FFT and LPC sonograms
- FFT power spectrum
- Cepstrum
- Autocorrelation
- Pitch tracks
- Formants tracks
- Energy
- Histogram and histograms correlation

Visualization and analysis for forensics, editing functions

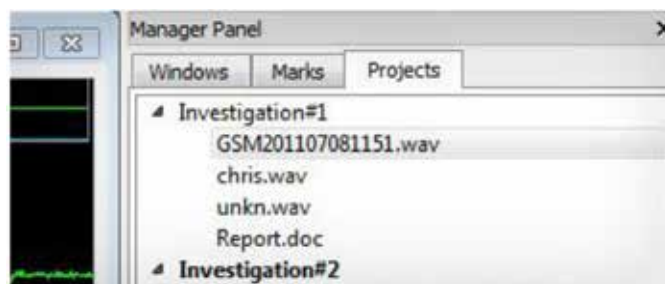
- Signal normalization
- Signal balancing
- Speakers separation
- Mixing
- Modulation
- Slowing/speeding up of speech tempo (without pitch distortion)
- Re-sampling
- Signal synchronization of several signals
- Splitting stereo signals and separation Stereo or merging of two mono signals into stereo.
- Phase change
- Waveform reversing
- Service real time marks decoding

Special features



Automatic Speaker Identification

- Automatic calculation of speech signal characteristics: assesses the suitability of a phonogram for identification purposes.
- Automatic marking of speech sections of a phonogram, plus the capability of indicating different types of noise.
- The high reliability of SIS-II automatic identification algorithms has been confirmed by NIST* test results



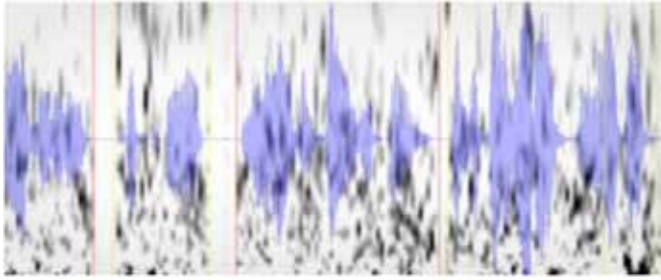
Working with Projects

- Create projects and add related files (audio, video, text).
- Open project files from the SIS II interface.



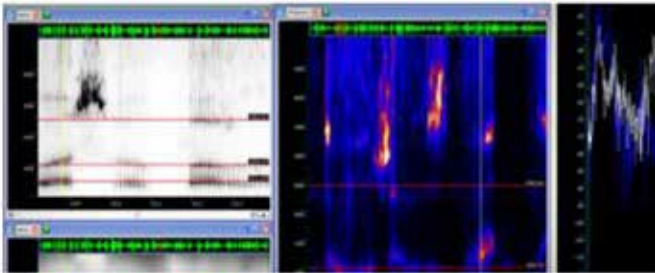
Easy Text Transcription and Export

- Selected fragments can be easily assigned to particular categories (e.g. different speakers or sounds) and speech fragments can be displayed as corresponding text. This output can be exported to Word as a text document.



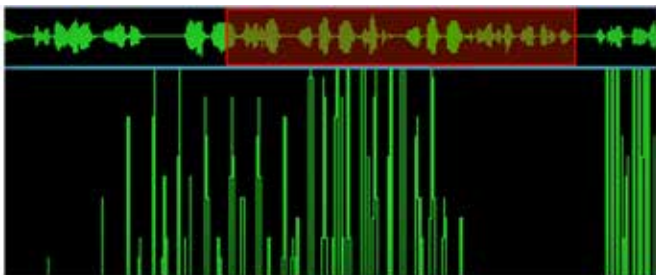
Work with Layers and Transparency

- Signals can be layered for easy comparison. Colors and transparency can be changed to ease readability. Optimal Window Arrangement Signal windows are arranged conveniently according to task: vertical for identification, horizontal for authentication and noise filtering, or customized according to user preference.



Optimal Window Arrangement

- Signal windows are arranged conveniently according to task: vertical for identification, horizontal for authentication and noise filtering, or customized according to user preference.



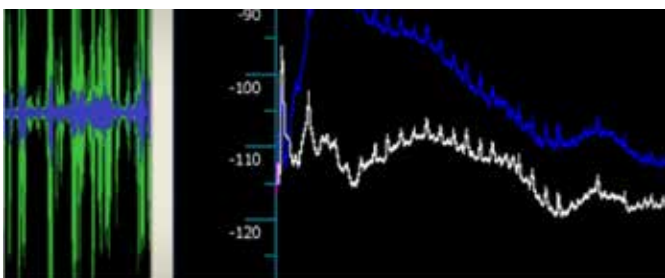
Convenient audio signal navigation

- Functional navigation oscillogram allows to see the whole signal. The visible section of a waveform is seen as a rectangle in the navigation oscillogram that you can easily move or choose other sections of a waveform.



Quick Text Search

- Quick search of text transcriptions finds words appearing in two or more waveforms, which is useful for comparison purposes.



Working with Spectrum Filters

- One of three filters (inverse, harmonic and spectrum-saving) can be created and applied to the signal spectrum, modifying its shape accordingly (e.g. to enhance speech, improve clarity, remove tonal noises, etc.). Filter processing is important in noise filtering and identification.