OUR INSTALLATIONS:

HOW TO CONTACT US?

MEDIA INVENTIONS S.C.
Ul. Wiślana 8, 00-317 Warszawa, Poland

email: info@media-inventions.com

www.imagetosound.com

EXPERIENCE

A clear need to create a specialized system for digitizing archival optical soundtracks appeared with the launch of the NITROFILM project by the National Film Archive in Warsaw (www.nitrofilm.pl). The aim of the project was to preserve the most valuable pre-war film collection of Polish cinematography by digitizing film materials, most of which were heavily damaged, flammable nitrate films. The National Film Archive stated that - due to the very poor condition of the film copies - the scanning process is to be carried out using the ARRISCAN scanner, and the number of runs of the nitrate films through the scanner must be kept to a minimum. Re-using films with a standard audio followers that use perforations and capture audio at 24fps was absolutely unacceptable. Audio digitization directly from scans suggested by Media Inventions s.c. appeared to be plausible and met the requirements of the National Film Archive. From 2011 to the present, over 20 pre-war feature films have been successfully digitized in the ITST system, and later also fully restored by Media Inventions s.c.

IMAGE TO SOUND TOOLS

Recommended for:

ARRISCAN XT

IMAGE TO SOUND TOOLS

A UNIQUE SYSTEM
TO DECODE AND DIGITIZE
OPTICAL SOUNDTRACKS.

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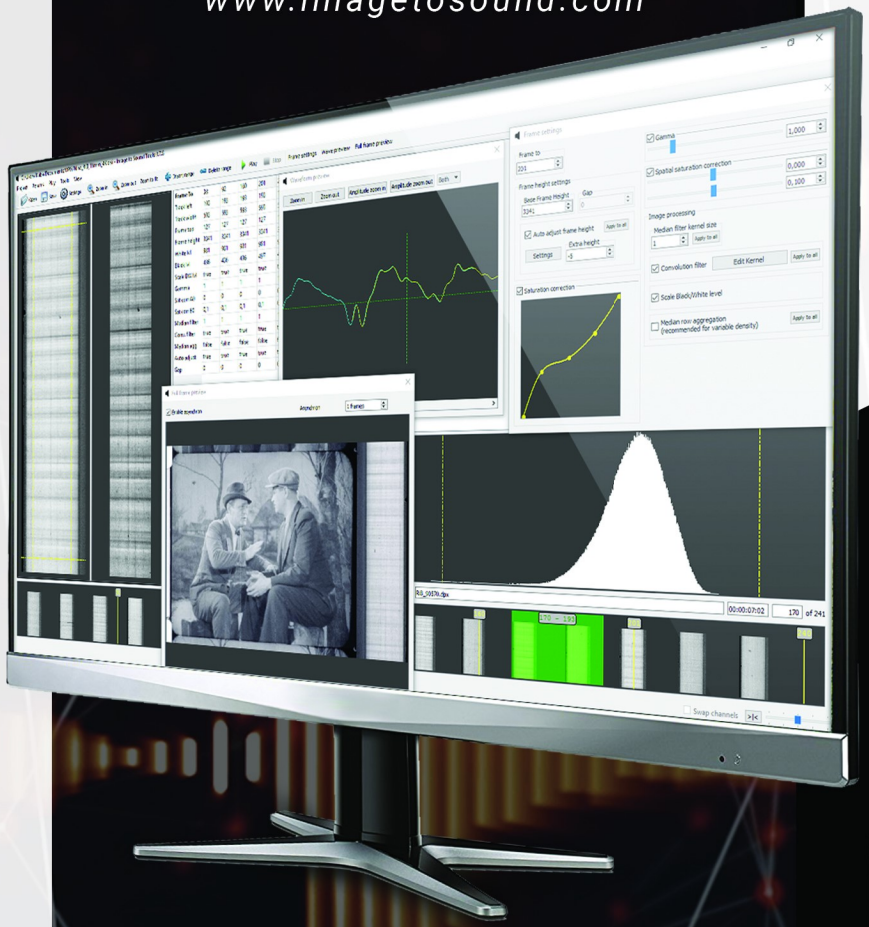
IMAGE TO SOUND TOOLS

This specialised software package enables to run the process of extraction of soundtracks (positive or negative) from DPX or TIFF image files generated in the process of film scanning and converts them into digital audio in WAV file format.

- *Stand-alone system suitable for 16mm and 35mm variable density and variable area soundtracks*
- *Real-time audio playback (looped playback) directly from image files with on-the-fly parameter adjustments*
- *Available functions: frame matching algorithms, black/white saturation corrections, gamma correction, image filters (median, Gaussian, averaging etc.), the algorithm to fill in soundtrack discontinuities*
- *Storing projects to files*
- *Efficient method for digitization of negative or positive, multiple variable area soundtracks even when they are damaged*
- *Workspace split into sections due to parameter changes*
- *Real-time video preview synchronized to audio (non-standard offset adjustment available)*
- *WAV file exporting (44,1/48/96/192 kHz@16/24/32 bits)*

IMAGE TO SOUND TOOLS



REAL-TIME OPERATIONS WITH SOUND!

Real-time sound playback directly from graphic files is the prime advantage of the ITST system. The audio playback or looped playback functions let to work out – with the use of available tools – optimal digitization parameters in a much shorter time, even with heavily damaged sound recordings. A ratio of offline image-to-sound processing speed is up to 3:1. It was reached primarily through ensuring appropriate processing algorithmization and hardware matching.

TECHNOLOGY (WORKFLOW)

The system was developed based on high-quality scans of 4K RGB DPX or TIFF files performed by the ARRISCAN scanner, in which RGB channels are encoded with a resolution of 10 or 16 bits each. DPX files can successfully become a source material for further conservation works in the field of image and sound processing using the ITST system. The ITST system is equipped with a set of image processing tools that allow to obtain the optimal sound quality from scans.