

DADiSP / WAV

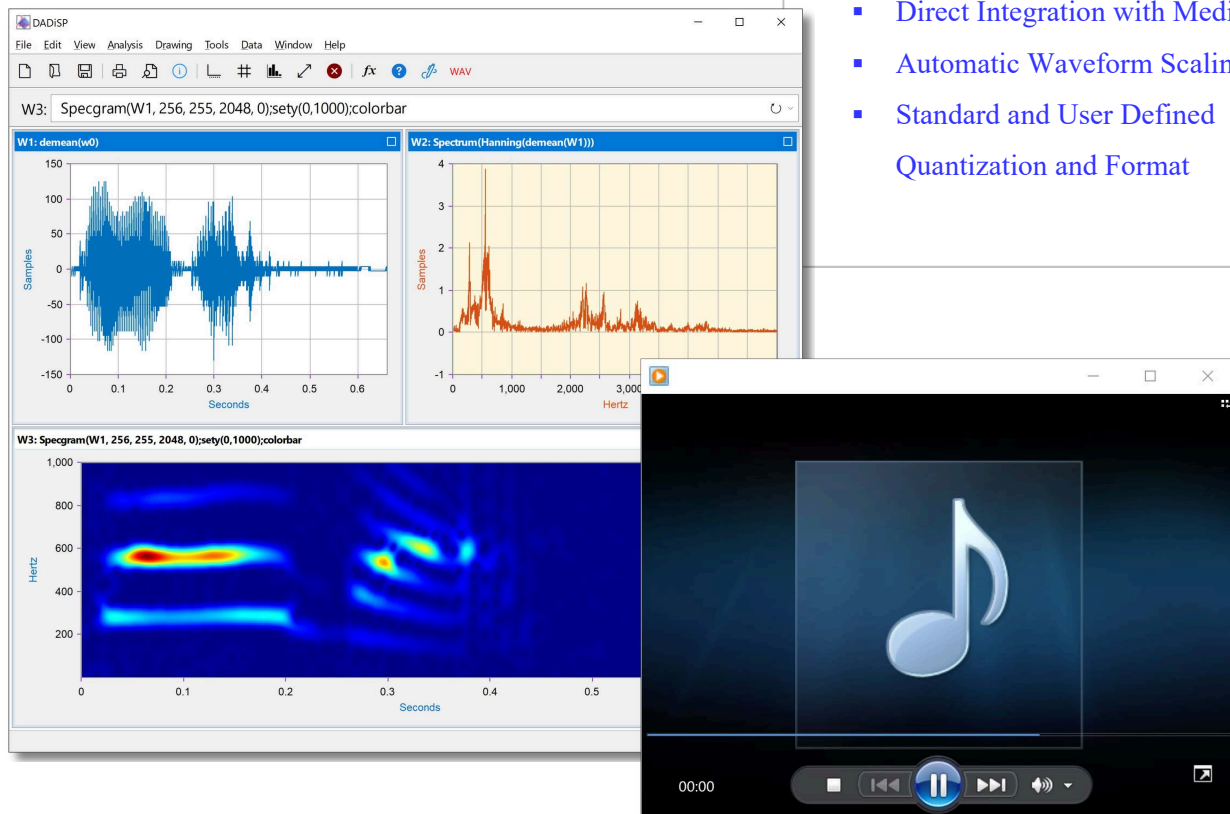
WAV Audio Module

DADiSP/WAV is fully integrated with the DADiSP Worksheet to provide a complete digital audio data analysis, display and processing environment. DADiSP/WAV allows the user to quickly read, write, and edit digital audio data from WAV format files via easy-to-use pop-up menus or simple one line functions.

The DADiSP/WAV module supports standard PCM WAV file format for 8 and 16 bit mono and stereo data files giving users the flexibility to work directly with their data and take full advantage of the WAV file format.

KEY FEATURES

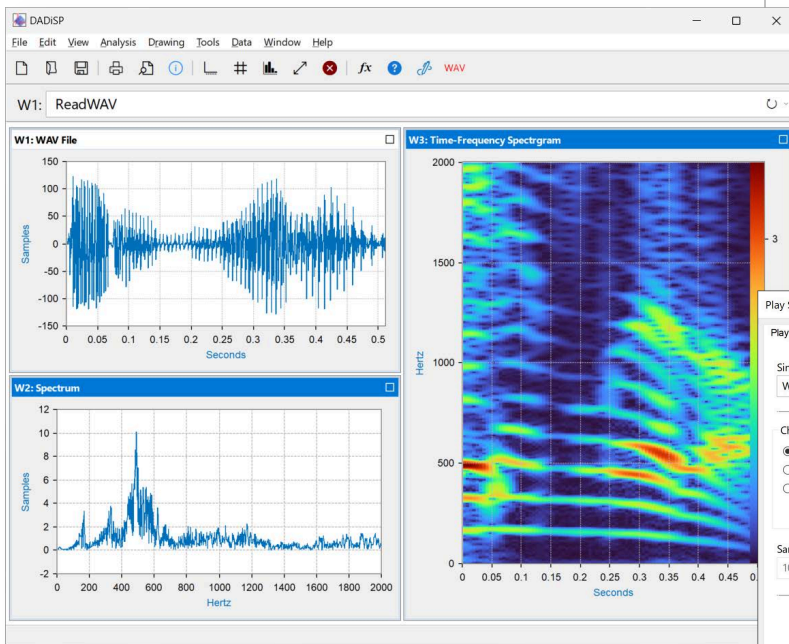
- Simple User Interface
- PCM WAV File Support
- Read, Write and Play any WAV File
- Fully Integrated with Media Player
- Mono and Stereo Support
- 8 Bit, 16 Bit and User Specified Quantization
- Descriptive Statistical Summary
- Streamlined Interface
- Direct Integration with Media Player
- Automatic Waveform Scaling
- Standard and User Defined Quantization and Format



New Features

DADiSP/WAV Version includes a completely redesigned user interface to streamline the process of creating, reading, writing and playing PCM, compressed and Extensible WAV files.

Waveforms from any DADiSP Window can be played with Windows Media Player or any WAV compatible application or directly without a player. The data is automatically scaled to provide optimal signal to noise ratio.

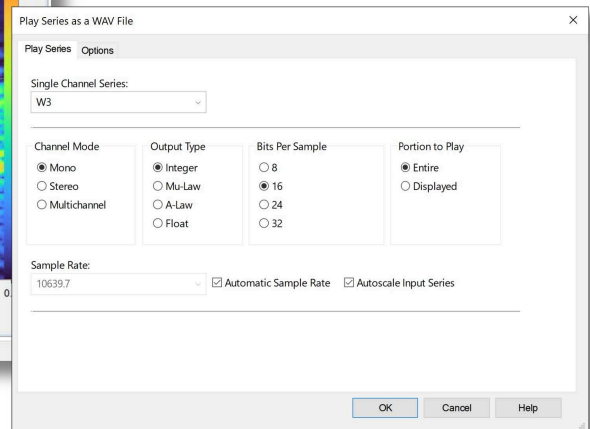


Series can be quantized to standard 8 bit, 16 bit, 24 bit, 32 bit resolution or user determined quantization and bit format can be specified for custom applications. In addition, both 32 bit single precision and 64 bit double precision floating point formats are supported. Mono, stereo and multichannel WAV file can be read, written and played.

Reading WAV files supports automatic decompression of μ -Law and A-Law WAV files and optional μ -Law and A-Law compression for writing WAV files.

WAV NEW FEATURES SUMMARY

- PCM 24 and 32 Bit Integer Support
- Extensible 32 Bit Single Precision Float Support
- Extensible 64 Bit Double Precision Float Support
- μ -Law File Compression and Decompression
- A-Law File Compression and Decompression
- Multichannel WAV Read and Write
- Direct Data or WAV Player Sound Output
- OEM Custom Scaling Information Support
- User Specified Sample Size for Reading



WAV Digital Audio Module

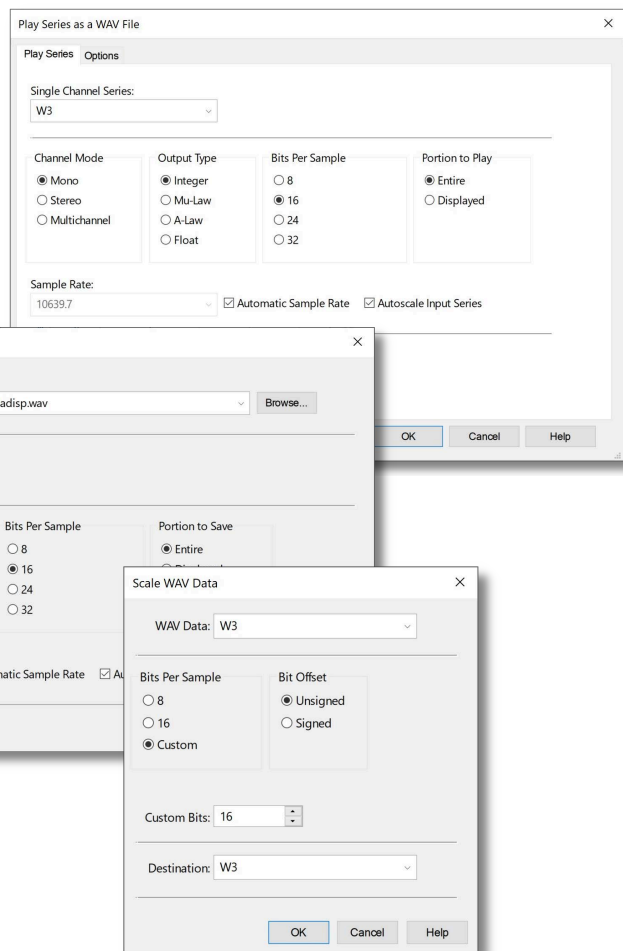
DADiSP/WAV provides a menu-driven user interface integrated directly into the DADiSP Worksheet to provide a complete digital audio processing environment. Existing WAV files can be read, processed and modified. New files can be generated and written in the WAV file format. DADiSP/WAV also allows the user to call any Windows compatible WAV player device and play WAV data on any WAV compatible sound card.

Read, Write, Create and Play WAV Data

Any WAV file can be read into a DADiSP Window for display and processing. DADiSP's extensive waveform editing capabilities can be applied to generate new WAV files. WAV files can be written with mono, stereo or multichannel data. PCM 8, 16, 24 and 32 bit integer format, compressed μ -Law and A-Law formats and 32/64 bit Extensible floating point formats are supported. Automatic amplitude scaling can be applied to produce audio files with optimal signal to noise ratios. A statistical summary of any series can be displayed to further aid waveform processing.

Clean Interface

Each routine is available through DADiSP's pop-up menus and as a direct command line function. Simple "fill-in-the-blank" menu fields provide a user-friendly interface to help get the job done quickly and efficiently.



Open Source

DADiSP/WAV is written entirely in SPL code, giving quick execution within DADiSP. These routines can be incorporated into user-defined functions and menus to further customize DADiSP to specific applications. All SPL source code, variable definitions and menus are supplied in ASCII text format and can be easily modified to meet the needs of custom applications.

WAV Functions

DADiSP/WAV includes several functions to read, write, play and scale data in the WAV file format.

WAV Functions

dispwavinfo	Display information on a WAV file
playwav	Play series directly without a player
readwav	Read a WAV file directly into a Window
writemono	Write a series to a mono channel WAV file
writestereo	Write two series to a stereo channel WAV file
playmono	Play a series in a mono channel WAV format
playstereo	Play two series in stereo channel WAV format
normalize	Normalize a series for N bit WAV file quantization
wavscale	Quantize a series to N bits