

# Waveform Analysis Software AS-70



# Completely Renewed Analysis Software from Rion

The Waveform Analysis Software AS-70 reads data from WAVE files and offers a wide range of functions, including graph display, level processing, frequency analysis (FFT analysis and octave band analysis), file output, and playback.

Easy and precise operation

Vastly improved processing speed

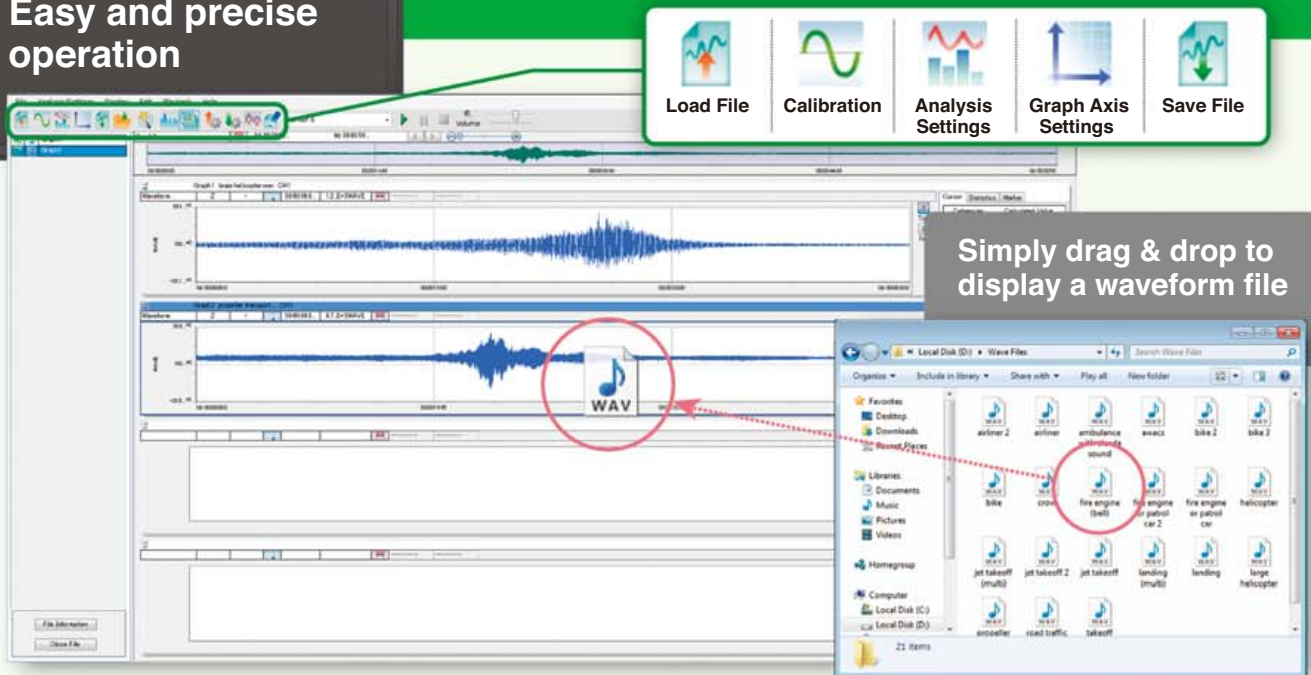
Simultaneous analysis of multiple files

User marker function

Digital volume control

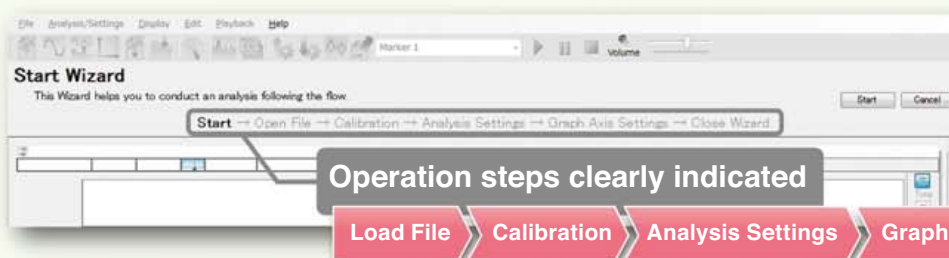
Easy and precise operation

Tool bar layout reflects operation sequence



Simply drag & drop to display a waveform file

Convenient wizard function for first-time users



Operation steps clearly indicated

Load File Calibration Analysis Settings Graph Axis Settings Save File

Template function makes it easy to repeat processing sequences

Automatic analysis

Load parameter settings created previously

Load Template

The settings (Calibration, Analysis, Graph Axis and Graph Size) are set according to the saved information.

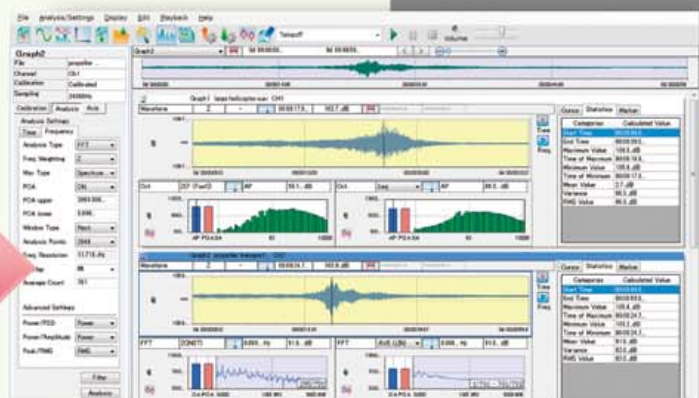
Select Template

FFT & OCT

Apply

Delete

Back





Vastly improved processing speed

Stress-free analysis of large data volumes

Comparison of processing time to previous product.

Previous product  
DA-20PA1

AS-70

Time from file reading to processing result display

Processing time

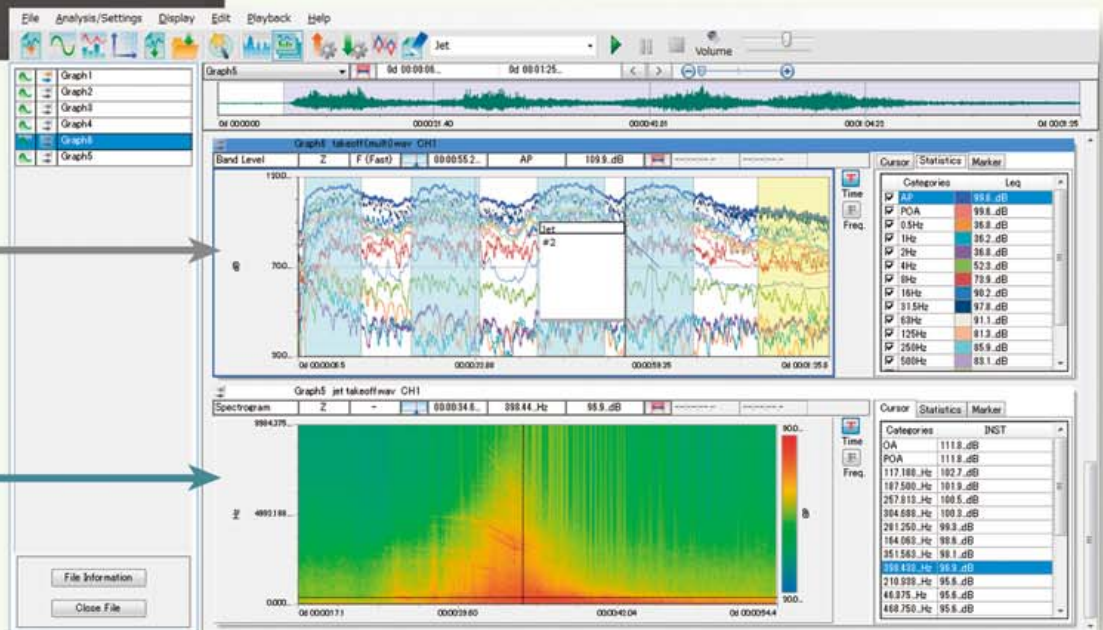
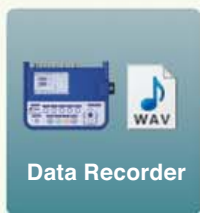
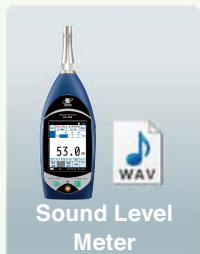
※Measurement conditions

1/5

Operation environment	CPU Core i5 3.2 GHz, 4 GB
Data file recorded time	1 h 24 min.
Processing time	6 min

Simultaneous analysis of multiple files

WAVE files from different sources, such as a sound level meter and data recorder, and from multiple locations can be loaded and analyzed simultaneously. A variety of operations can be performed easily and with high processing speed, such as graphical display, level processing, sound playback and FFT and octave band analysis. The results can be saved in various formats.



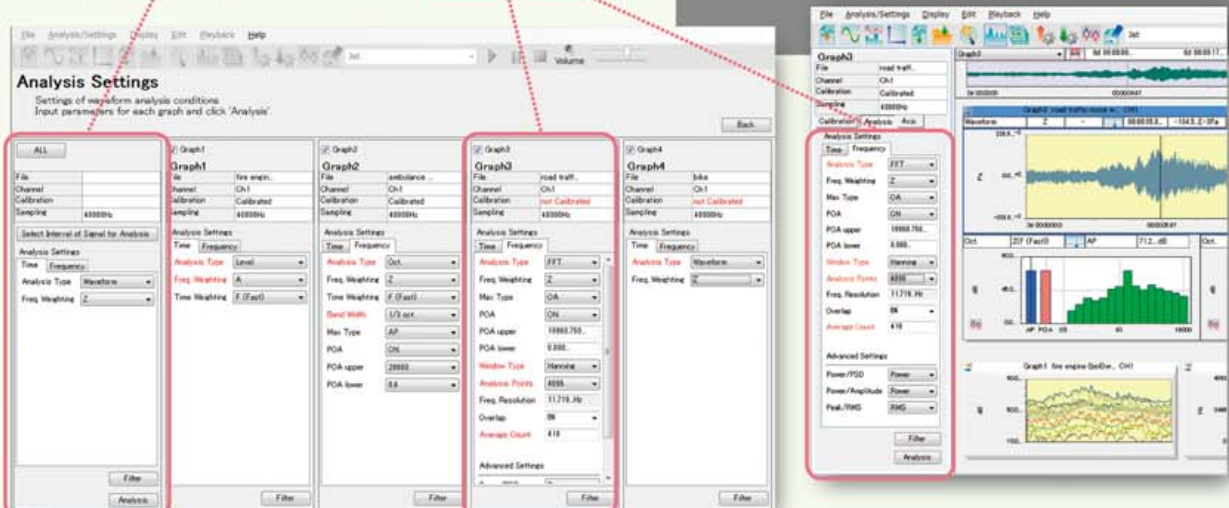
## Setting method

Settings can be made globally or for each graph individually

Global

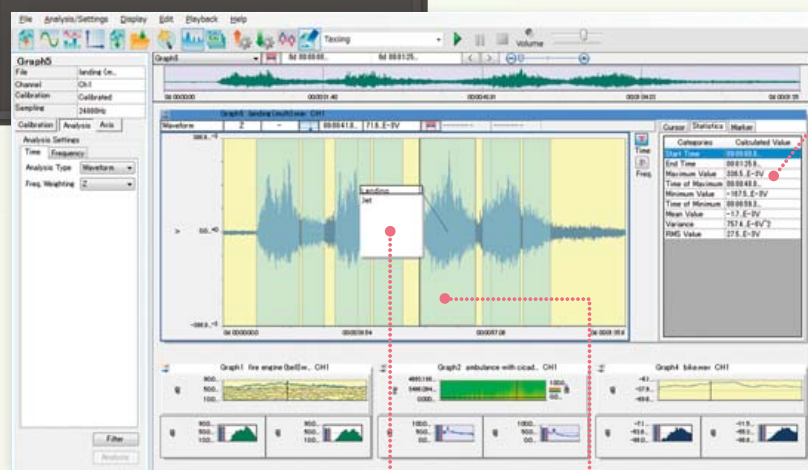
Graph-specific

When operating with multiple graphs, the analysis type (octave band analysis, FFT analysis) and analysis parameters can be set either globally or for each graph separately.



## User marker function

Markers with comments can be placed on the time graph.



Access a specific point from the marker list

Choose from 10 types of marker names

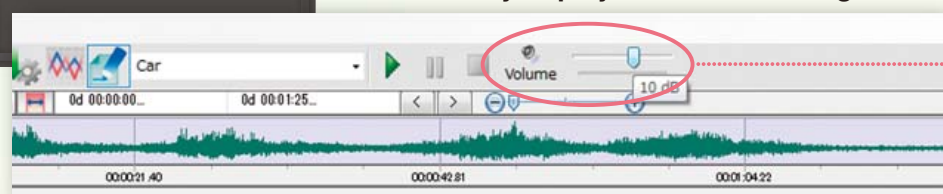


Enter any comment

Add marker

## Digital volume control

When playing back data with low recording level (because level range was too big, or bit word length too long), the volume may be very low, making the sound difficult to hear. The digital volume control lets you play such files at a higher volume.



Digital volume control

**Supported models** (WAVE files recorded with the following products can be used)

RIONOTE

NX-43WR/42WR

VX-57WR/55WR

NX-28WR

SA-78WR

DA-21/40/20

VA-14/12

General WAVE format files can also be opened (with some restrictions regarding sampling frequency and number of channels)

### Specifications

Applicable standards		IEC 61672-1:2013, JIS C 1509-1:2017 (Frequency weightings A, C, Z; Class 1) ISO 7196:1995 (Frequency weighting characteristic G) IEC 61260-1:2014, JIS C 1514:2002 (Octave-band and 1/3 octave-band filters, Class 1) JIS C 1510:1995 (Frequency weightings for vertical and horizontal vibration)
Supported file format	WAVE format	Sampling frequencies [Hz]: 64 k/51.2 k/48 k/32 k/25.6 k/24 k/16 k/12.8 k/12 k/5.12 k/2.56 k/2.4 k/1.28 k/1.2 k/1 k/512/256/240 Bit word length: 16 bit/24 bit
	Time graphs	Display types: Amplitude waveform, level waveform, band level, spectrogram Frequency weighting characteristics: Z, A, C, G, C to A, $L_{vz}$ (vertical characteristics), $L_{xy}$ (horizontal characteristics) Time weighting characteristics: 10 ms, F (Fast), 630 ms, S (Slow), 10 s
Frequency graphs	Display types	Octave band analysis, FFT analysis
	Bandwidth	Octave band: 0.5 Hz to 16 kHz (16 bands) 1/3 octave band: 0.4 Hz to 20 kHz (48 bands)
	Window functions	Rectangular, Hanning, Flat-top, Hamming
	Number of analysis points	32 to 65 536 (base-2)
Statistical processing	Overlap	0 to 99 %
	Data view	Power spectrum, power spectrum density (Power/Amplitude, Peak/RMS selectable)
	Amplitude waveform	Maximum value, minimum value, average value, variance, effective value
	Level waveform/octave analysis	$L_{eq}$ , $L_E$ , $L_{max}$ , $L_{min}$ , $L_N$ (5 types)
FFT analysis		Linear average, maximum value
File save function		Save formats: WAVE format, text format
Other functions		Successive calculation results: Results saved as text at calculation intervals (1 ms to 24 h) Differential and integral filter: 1st order integration, 2nd order integration, 1st order differential, 2nd order differential HPF, LPF: Cutoff frequency: any setting Slope: 6 dB/12 dB/18 dB/24 dB (per octave) Overlay: Two frequency spectra can be shown as a superimposed (overlay) graph, with optional difference indication Real-sound playback: Play, stop, pause, digital volume control Clipboard copy: Screen, graph, list
Recommended operation environment		
CPU		Intel Core i5 2 GHz or faster
RAM		2 GB or more, 4 GB recommended
HDD		20 GB or more (free space), 100 GB or more recommended
Display		XGA (1024 x 768 pixels) resolution or higher
Supported operating systems		Microsoft Windows 10 Pro 64 bit, 11 Pro 64 bit



**JCSS**  
JCSS 0197

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