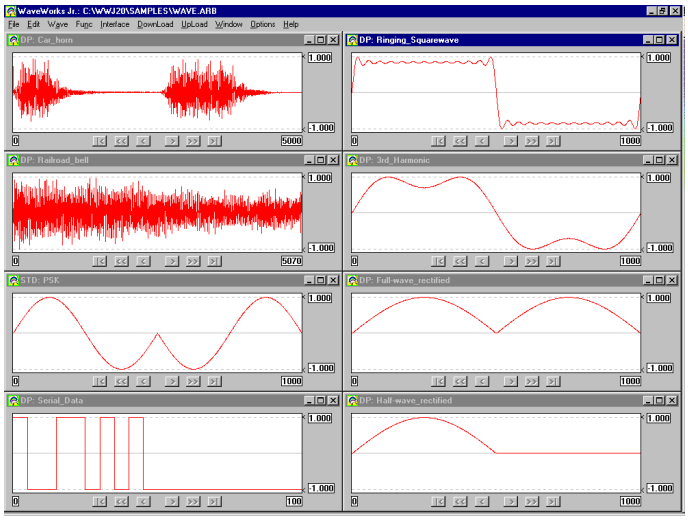
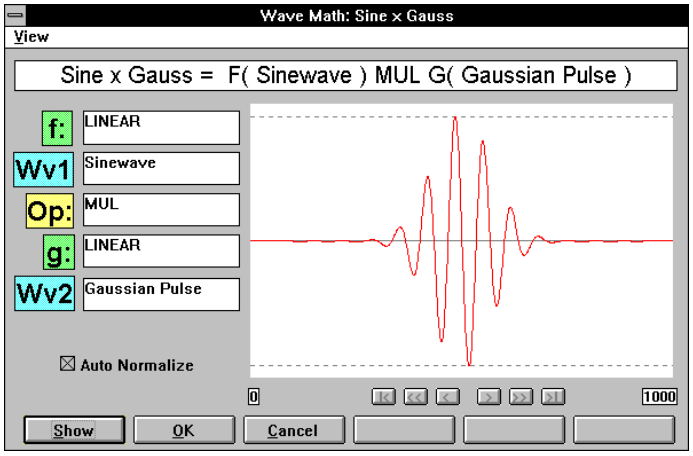
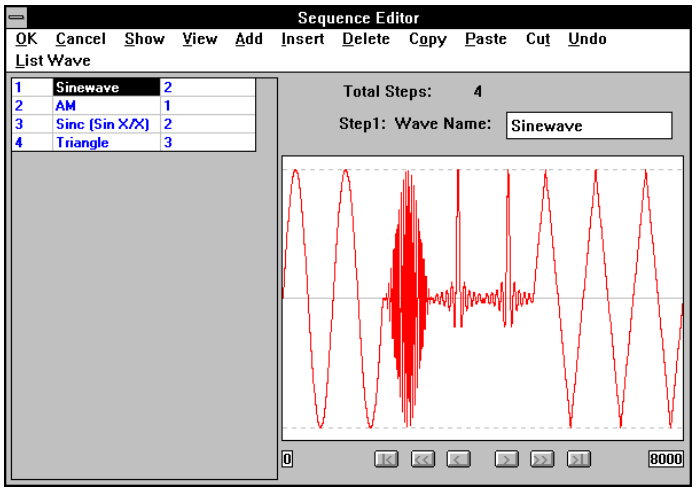
WaveWorks™ Jr.

Waveform Creation Software
for Windows

The simplest, most intuitive way to make the waveforms you need.







New WaveWorks™ Jr. turns your computer screen into a waveform palette. An extensive waveform library with a complete set of design and editing tools. Works with all 2700 series Pragmatic waveform generators. *Now you can solve all your waveform needs like a pro!*

This prolific software is a virtual function generator with unlimited real waveforms and control parameters. A comprehensive array of math operations and transfer functions to design your most demanding waveshape. Synthesis in both the time and frequency domain is provided by FFT and IFFT routines. Import spreadsheet files, accomplish data analysis, facilitate documentation and report writing with ease.

FEATURES

- **Supported Instruments**
  - Pragmatic 2700 Series Generators
- **Functions**
  - 21 Standard Waveforms
  - 12 Math Transfer Functions
  - 6 Math Operations
  - Digital Pattern
  - FFT and IFFT
  - Sequence Programming
- **File Import / Export**
  - Common ASCII Formats (.CSV, .PRN)
- **GPIB and RS-232 Support**
  - Waveform Data Download / Upload
  - Instrument Control Panel

PRAGMATIC® INSTRUMENTS, INC.

WaveWorks™ Jr.

Waveform Creation Software for Everyone

WaveWorks Jr.

STANDARD WAVES

All 21 standard waves with the required parameters are set up in the selected screen for instantaneous use.

Sine	**Square**	**Triangle**	**DC**
Ramp	**Squine**	**Gaussian**	**Pulse1**
Pulse2	**SinX/X**	**AM**	**FM**
PWM	**BFSK**	**BPSK**	**Comb**
Steps	**Cont. Sweep**	**Exponential**	
Analog Noise	**Digital Noise**		

WAVEFORM GRAPHIC MATH

Math Transfer Function

All 12 transfer functions including integration and differentiation are available to modify the waveform in the specified manner.

Null	**Linear**	**Section**	**Square**
Absolute	**Log**	**Square Root**	**Polynomial**
DC Cut	**Normalize**	**Rotate**	**Mirror**

Math Operator

Complex waveforms are readily created by use of the 6 operators. Each of the waveforms in the set are included in developing the final result which is downloaded to the generator memory.

Addition	**Subtraction**	**Multiplication**
Cascade	**Insert**	**Add_Into**

SEQUENCE PROGRAMMING

Sequence offers virtual memory expansion and comprehensive real-world simulations. Any waveform stored in memory may be output in any order in a seamless manner and be repeated up to 1,000,000 times. Test profiles are easily defined by the use of a table to select each waveform in turn and designating the number of times each is looped.

EDIT

Waveforms are readily edited by use of 7 powerful editors.

Copy	**Paste**	**Point**
Vertex	**Digital Pattern**	**Harmonics(FFT, IFFT)**
Sequence		

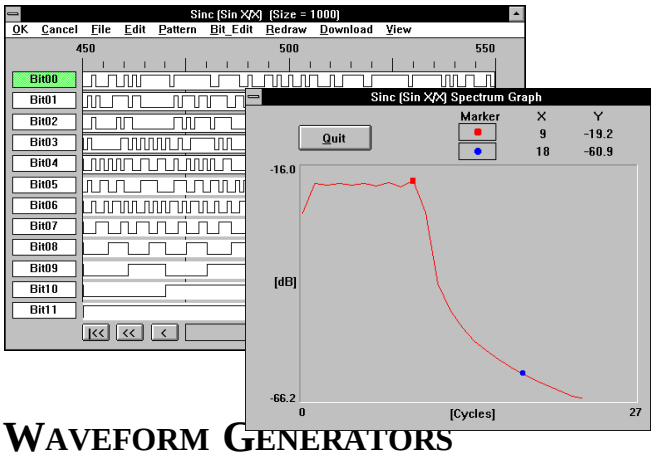
AUXILIARY FEATURES

Fast Fourier transform offers frequency analysis and graphical presentation for frequency spectrum editing. Recreation of the time-domain waveform is offered using the inverse transform. A complete sample value tabulation of each waveform allows for point-by-point modification. A digital pattern describes the bit-by-bit synthesis of each waveform for editing in this arena.

Waveform Analysis/Synthesis

Frequency Domain: FFT and IFFT
- Harmonics: up to 500th
- Displays: graphic and tabulation
- Entry: tabulation
- Units: Sin-Cos(Ampl), Sin(Ampl-Phase), Cos(Ampl-Phase), Sin(dB-Phase), Cos (dB-Phase)
- Other feature: random phase entry

Time Domain: Digital Pattern
- Display: graphic
- Edit: mouse



WAVEFORM GENERATORS

2711A, 2714A

COMPUTER REQUIREMENTS

Operating System

Windows 95 or 3.1, MS-DOS 6.2

PC Requirements

486DX or better with 4MB free RAM space

Interface

Serial: COM port; RS-232C, up to 19.2 kBaud
GPIB: National Instruments AT-GPIB card
IEEE standard 488.2-1987

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