

30MHz FUNCTION GENERATOR

SG-4300 Series

Various types of output waveforms



Various Oscillation Modes

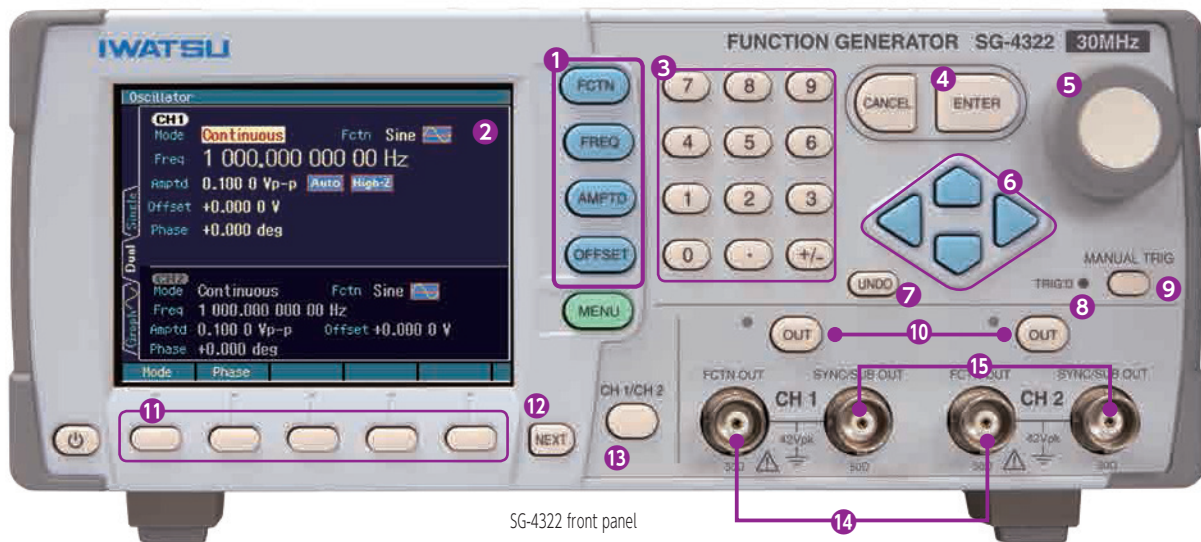
- Sine •Square •Pulse •Ramp •Parameter-variable •Arbitrary

Standard waveforms, Large capacity arbitrary, Standard parameter variable waveforms(25 waveforms)

Versatile Functions

- Sweep •Modulation •Burst •Trigger •Gate •Sequence •Synchronous operation •Variable duty •Variable rise •Variable fall

Equipped with program operation, parameter-variable waveforms etc.,



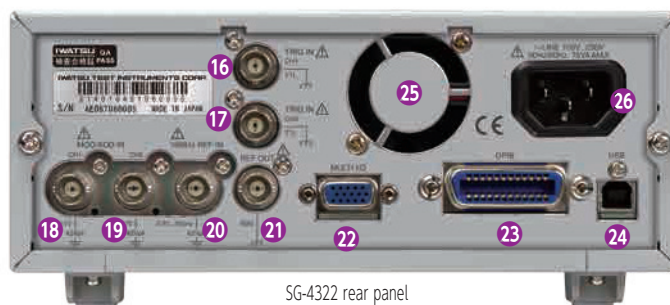
SG-4322 front panel

- 1 Basic Parameters / Shortcut keys
- 2 3.5# QVGA TFT Color LCD display
- 3 Ten-key for direct input
- 4 Enter key : Execute each setting
- 5 Function knob for selecting items and values
- 6 Arrow keys
- 7 UNDO key for undo
- 8 Triggered indication light
- 9 Manual Triggering key
- 10 OUT : Output on/off key
- 11 Soft keys for setting selectable functions
- 12 NEXT key for selecting from multiple setting pages
- 13 CH1/CH2 key for switching CH1 or CH2

- 14 CH1 and CH2 signal outputs
Isolated by each channel
 - Independent setting by each channel
 - Phase shift control between 2 channels
 - Synchronized output in different phase
 - Frequency variable between 2 channels
 - Different frequency output between 2 channels
 - Differential output

- 15 CH1 and CH2 synchronized signal outputs
Reference phase synchronization
 - Synchronized signal with internal frequency modification
 - Burst synchronization signal
 - Sweep synchronization signal
 - Sequence step synchronization signal
 - Synchronized signal with internal modification signal
 - Sweep X driving signal for X axes of oscilloscope/recorder

- 16 CH1 Trigger input BNC
- 17 CH2 Trigger input BNC
- 18 CH1 Output modification/Adder input BNC
- 19 CH2 Output modification/Adder input BNC
- 20 Outer 10MHz reference frequency signal input BNC
- 21 Frequency reference signal output BNC
- 22 Multiple I/O connector for sweep, sequence control and synchronization code output



SG-4322 rear panel

- 23 GPIB interface connector
- 24 USB interface connector
- 25 Fan motor
- 26 AC inlet(AC90V to AC250V)

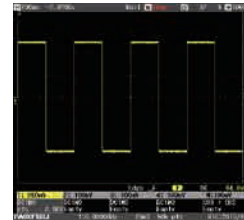
Sequence control function

Programmable each signal waveform pattern

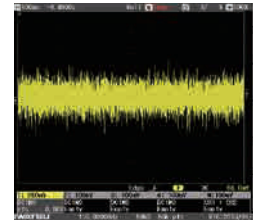
Sequence oscillation is used to program combination of multiple pattern outputs such as Waveform type, frequency, amplitude, duty cycle and offset. It can be used together with parameter variable function at complicated and long timeframe waveform patterns for sudden frequency/sweep variable.



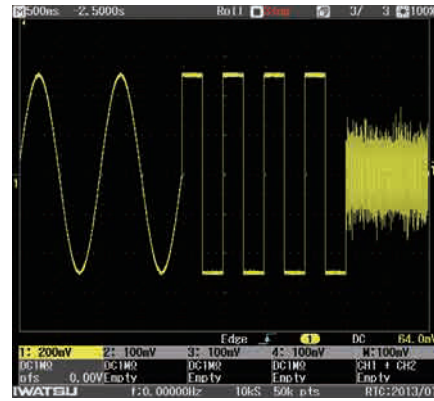
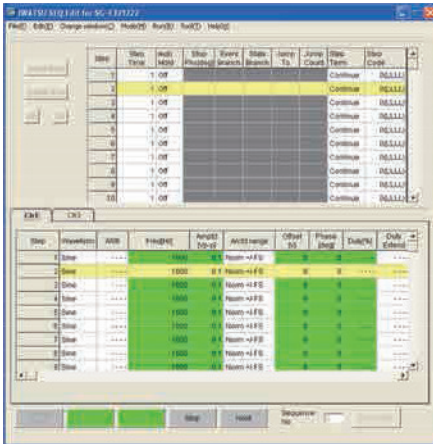
Waveforms 1



Waveforms 2



Waveforms 3



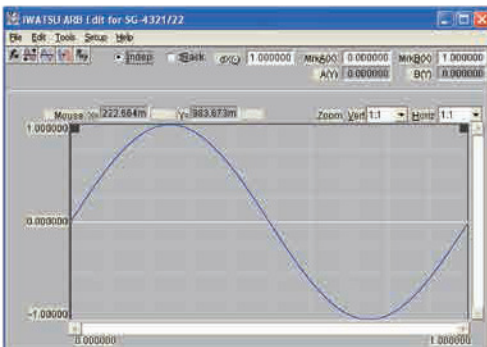
Waveform 1+2+3 at long memory

Arbitrary signal waveform with free-download software

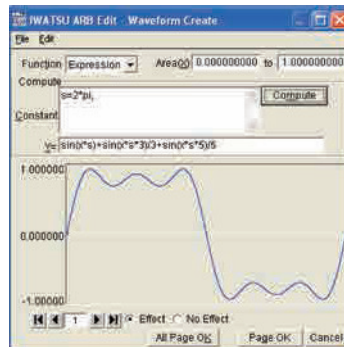
4M-word waveform memory for 512k-word/waveform, max.

Maximum 512k-word/waveform outputs are available with arbitrary waveform generating software for example;

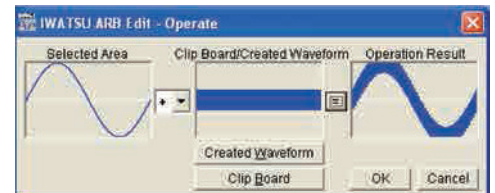
- Copy and paste of pre-set waveform shapes for complex signal waveforms.
- Waveform generation from waveform formula
- Expansion and compression of signal waveforms
- Computation between waveforms



Arbitrary waveform generating software ARB Edit



Waveform formula setting and waveform



Computation between waveforms

Specifications

		SG-4322	SG-4321
Product name		Function Generator	
Oscillation frequency		0.01 μHz to 30MHz	
Number of channels		2 ch	1 ch
Vertical resolution for waveform		14bit	
Waveform and frequency range	~	0.01 μHz to 30MHz	
	▭ (duty fixed)	0.01 μHz to 15MHz	
	▭ (duty variable)	0.01 μHz to 15MHz	
	▭	0.01 μHz to 15MHz	
	~ (symmetry variable)	0.01 μHz to 5MHz	
	Parameter-variable waveforms (25 types)	0.01 μHz to 5MHz	
	Arbitrary waveform	0.01 μHz to 5MHz	
Noise	Bandwidth 26MHz		
Frequency setting resolution		0.01 μHz	
Rising/falling variable		Pulse 15.0ns to 58.8Ms	
Arbitrary waveform data length/number of waves		512k words / 128 waves, 4Mwords	
Maximum output voltage/resolution		20 Vp-p/open, 10 Vp-p/50 Ω, Resolution: 0.1 mVp-p or 1 mVp-p (depending on conditions)	
User-defined unit		<input type="radio"/>	<input type="radio"/>
Input/output floating		<input type="radio"/>	<input type="radio"/>
Isolation between channels		<input type="radio"/>	—

		SG-4322	SG-4321
Oscillation mode	Continuous oscillation	<input type="radio"/>	<input type="radio"/>
	Burst/trigger/gate/triggered gate	<input type="radio"/>	<input type="radio"/>
	Sweep	Frequency, phase, amplitude, DC offset, duty ratio	
	Internal modulation	FM, FSK, PM, PSK, AM, DC offset and PWM	
	External modulation		
	Sequence	<input type="radio"/>	<input type="radio"/>
Two channel mode	<input type="radio"/>	—	
Synchronous operation		<input type="radio"/>	<input type="radio"/>
External addition		<input type="radio"/>	<input type="radio"/>
Setting storage		<input type="radio"/>	<input type="radio"/>
GPIB interface		<input type="radio"/>	<input type="radio"/>
USB interface		<input type="radio"/>	<input type="radio"/>
Color LCD display		<input type="radio"/>	<input type="radio"/>
Arbitrary Waveform Editor		<input type="radio"/>	<input type="radio"/>
Sequence Editor		<input type="radio"/>	<input type="radio"/>
Power supply		AC90V to 250V	
Power consumption		75VA以下	50VA以下
External dimensions (mm) *2		216 (W) × 88 (H) × 332 (D)	
Weight		approx. 2.1 kg	approx. 2.1 kg
Application Software		Sequence Editing Software	
Option		SG-510 Multi Cable for input and output	