

# **JDS2915** Dual-Channel Signal Generator

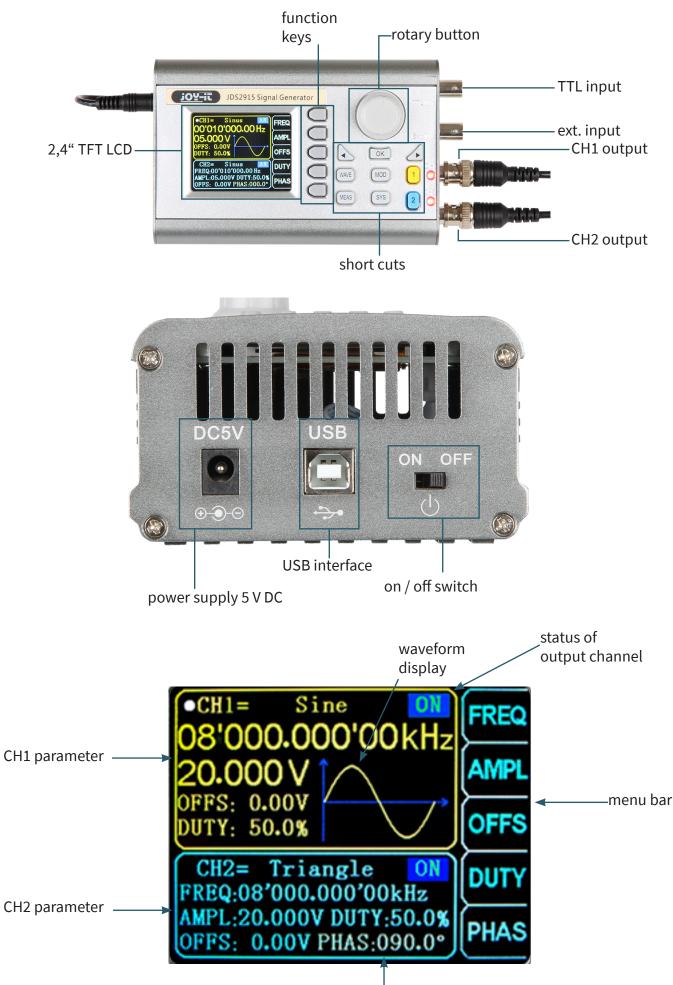


### **1. GENERAL INFORMATION**

Dear customer,

thank you for purchasing our product. In the following, we have listed what you should consider during commissioning.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.



WAVE	configuration of wave form
MEAS	configuration of measuring mode
MOD	activation of the modulation mode
SYS	system settings
ОК	control of the output from CH1 and CH2 - It is used in other menus as control and confirmation (on / off)
	Moving the position of the crusor
CH1	selection of channel 1 - Hold down to set channel 1 as the main channel.
CH2	selection of channel 2 - Hold down to set channel 2 as the main channel.

# 4. PARAMETER SETTINGS IN THE MAIN INTERFACE

Press OK to enable or disable simultaneously the output of both channels.

Use the buttons CH1 and CH2 to switch between each channel. By pressing it again while you are in one channel, you activate or deactivate the according output. Hold down the according channel button to place the channel in the main interface.

Press the WAVE button to activate the waveform. While the waveform is active, the form can be changed quickly with the rotary button. The arrows keys can be used to switch between the waveforms and the presettings.

Press the button MEAS and after that the multifunctional button FUNC in the measuring mode to switch between the measuring function and the counting function.

It can be measured the input frequency, period, positive pulse width, duty cycle and other parameters. The measuring frecueny range is between 1 Hz and 100 MHz. The measuring signal amplitude range is between 2 Vpp and 20 Vpp. The input interface is ext. IN.

## **Coupling settings:**

Press the multifunctional button COUP to change between the AC and the DC mode.

### Gate time settings:

Press the multifunctional button GATE to set the gate time (0.01 - 10 S). Move the cursor with the arrow keys to the value which should be edited. Use the rotary button to adjust the value.

#### Measuring mode:

Press the multifunctional button MODE to change between the counting frequency and the counting period.

#### Measurement parameters:

Frequency, period, positive pulse width, negative pulse width, duty cycle

After you have set all parameters, you can use the multifunctional button to start the counting function. The multifunctional button an stop the function.

### 6. MODULATION MODE

Press the button MOD to start the modulation mode. Press the multifunctional button FUNC to switch between the sweep function (channel CH1 / CH2), the pulse function (channel CH1) and the burst function (channel CH1).

#### **Sweep function:**

You can set any starting and ending frequency of the signal generator. The possible time is between 0.1 and 999.9 s.

In the sweep mode, press the multifunctional buttons to set the starting and ending frequency, as well as time, direction and mode. After selecting the respective setting, the arrow keys and the rotary button can be used for adjustment.

# **Pulse function:**

With this option, it is possible to configurate the pulse wave width and the pulse time.

Press the multifunctional buttons within the pulse function to select the pulse width, period, offset and amplitude. As soon as a parameter is highlighted, you can adjust it with the arrow keys. The pulse width and time can be set using the rotary button. You can switch between ns and  $\mu$ s with the button OK .

# **Burst function:**

The pulse sequence can be set on the output from 1 to108575 periods. The burst mode is devided in internal CH2 channel bursts, external input bursts and manual bursts. The time of a period from a burst is smaller than the time of a period from a burst signal.

Press the multifunctional buttons within the burst function (channel CH1) to select the pulse number and the burst mode. The arrow keys can be used to set each parameter.

After all settings are adjusted, you can use the multifunctional button ON to start each function and OFF to end it.

# 7. SYSTEM SETTINGS

Press the button SYS multifunctional buttons settings can be made:

to o	pen	tl
		/

the setup menu. Use the to navigate. The following

Save & load, sound settings, configuration of brightness, language settings, synchronization, setting of the arbitrary wave display

After you have opened the according setting, you can adjust them with the rotary button. Press the multifunctional button SAVE to save the according configuration.

### Save & load:

In save & load you can save ( SAVE) the adjusted values in data groups (0 - 99) and if needed you can load them again on your device ( LOAD ). You can clear data groups with the multifunctional button CLR.

# Sound setting:

The sound can be activated or rather deactivated through the multifunctional buttons ON and OFF .

# **Configuration of brightness:**

You can adjust the brightness in 12 different levels.

# Language settings:

The English, German and French language are available.

# Synchronization:

The channel CH1 is used as the target during the synchronization. The parameters of the channel CH2 will change according to the parameters of CH1. If the synchronization point is highlighted, press the buttons to select the point which has to be synchronized.

Use the multifunctional button	ON	to select and	OFF	to
quit the process.				

### Settings of the arbitrary wave display:

The amount of wave forms in the main interface can be adjusted via the rotary button (1 - 60) very quickly.

# 8. PC SOFTWARE INSTALLATION

You can download the latest version of the PC software on our Website.

Start the installation by opening the file **JDS6600.exe**.

Press **Next >>** in the now opening window.

NI-VISA 5.4 Runtime			_		×
				ni.com/v	/isa
NI-VISA <sup>™</sup>					
National Instru	ments VISA Soft	ware			
Disabling virus scanr This program is subje	efore running this insta ing applications may ir ct to the accompanyin Corporation is an auth	nprove installation spe ig License Agreement	(s).		
© 1995-2010 Nation	nal Instruments. All rig	hts reserved.		IATIONAL ISTRUME	NTS
		<< Back	Next >>	Cano	el:

Next, enter the installation path and confirm with **Next >>**.

Destination Directory Select the primary installation directory.		X	INSTRUME
National Instruments software will be installed in a s cifferent folder, click the Browse button and select a	utfolder of the followi another.	ng. Toinstall in	to a
Destination Directory			

The selection of the modules to be installed must also be confirmed with **Next >>**.

VI-VISA 5.4 Runtime Features Select the features to install.			IATIONAL ISTRUMEN	× TS
NI-VISA 5.4 Run Time Support PXI GPIB Serial Ethernet Remote Enet-Serial USB GPIB-VXI (Legacy) TULIP COM Support	provides an API and other types	ents VISA driver v for controlling VXI, of instruments.		
Directory for NI-VISA 5.4 C:\Program Files (x86)\IVI Foundation\VISA\			Browse	
Restore Feature Defaults Disk Cost	<< Back	Next>>	Cance	el

If you do not want the automatic search for updates enabled, you can now disable it by unchecking the option. Then continue with **Next >>** again.

💷 NI-VISA 5.4 Runtime		-	×
Product Notifications Please read the following information about the configuration yo selected.	i have 🌾	NATIONAL INSTRUMENT	2.
Bearch for important messages and updates on the National Instrum.			
Privacy Policy.			
Note: You will be given the opportunity to select the upd	ates you want l	to install.	
		Privacy Policy	
		_	
<< Back	Next >>	Cancel	

The system quick start introduced in Windows 8 occasionally causes problems in connection with the installation and removal of new hardware and should therefore be disabled. Confirm the deactivation with **Next >>**. Alternatively, you can leave the system quick start enabled at your own risk. To do so, simply uncheck the appropriate box.

💷 NI-VSA 5.4 Runtime	_		×
Disable Windows Fast Startup Disable Windows fast startup to prevent problems with installing or remo hardware.		ATIONAL STRUMEN	TS.
The fast startup capability introduced in Microsoft Windows 8 may cause or removing hardware. National Instruments recommends disabling Windo more information about fast startup, click the following link or visit ni.com/i Code WinFastStartup.	ws fast startup	. For	
Windows Fast Startup Information			
Disable Windows fast startup to prevent problems with installing or rem	noving hardwar	e.	
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The installation program now performs the corresponding installations. After successful installation, you can exit the installer.

# 9. USING THE SOFTWARE

You can connect the signal generator to your computer either with a USB cable or with a USB-TTL cable.

Now start the JDS6600 software. Here you can first select the port where you have connected the signal generator to your computer. If you are not sure which COM port you have connected your signal generator to, open the Device Manager and check the connection in the Connections tab (COM & LPT).

JDS6600				-		×
Configuration	Control Panel	Extend Function	Arbitrary			EXIT
	> 2DI	S Signal Genera	tor Contro	ol Panel		
		Port: Model:		Connect		
					Serial	Number:

### Then establish the connection with **Connect**.

In the **Control Panel**, which you can reach via the tab at the top of the software, you can output the standard waveforms and function signals.

JDS6600			×
Configuration	Control Panel	Extend Function Arbitrary	EXIT
Frequency Amplitude Amplitude V Duty Uuty A 0,00	X-Axis(dots)	12 Frequence 5 - 5 - 6 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	0,00 Hz e Offset 100 V - 10,00 V Duty
	Adjust Iten Frequency Step Value 10	Adjust Items Adjust Items Frequency Mave form Sync Adjust Items Frequency Step Value 1000,00 Hz Duty Sync	

At **Extend Function** you will find the measuring, counting, burst, sweep and pulse functions.

JDS6600						×
Configuration	Control Panel	Extend Function	Arbitrary		-	EXIT
	rement Function 0,00 Hz rement Selection  bde M.Freq	Gate Time			rsts Number 5 Aode Manual Trig	СК СК Run
Sweep Frequency Starting Frequence 1000,00 End Frequency 10000,00 Channel	Hz <b>10,0</b> Direction Hz Rise	S Run	Pulse function Pulse Width	Unit Unit Unit Ins	Pulse amplitude	Run
СН1	CH2 Logarithm	Linear		Save	Load Clea	r

In **Abitrary**, you can create various custom waveforms and store up to 15 on the device.

Configuration	Control Panel	Extend Function	Arbitrary		EXIT
1- y 0,5- 1- 0,5- -0,5- -0,5- -1- 0 500	1000 1500 2047 Peints	0,4-	800 1000 1200 1400 1 X-Points		Standard waveform Sine
Option Type	Math	Phase shifter	Reset Mirror	Open Save	Storage Location

### **10. FURTHER INFORMATION**

Our information and redemption obligation according to the electro-law (ElektroG)

# Symbol on electrial and electronic products :

This crossed-out bin means that electrical and electronic products do not belong into the household waste. You must hand over your old appliance to a registration office. Before you can hand over the old appliance, you must remove used batteries and accumulators which are not enclosed by the device.



#### **Return options :**

As the end user, you can hand over with the purchase of a new device your old appliance (which has essentially the same functions as the new one) free of charge for disposal. Small devices which do not have outer dimensions greater than 25 cm can be submitted independently of the purchase of a new product in normal household quantities.

# Possibility of restitution at our company location during our opening hours :

Simac GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

#### **Possibility of restitution nearby :**

We send you a parcel stamp with which you can send us your old appliance free of charge. For this possibility, you must contact us via e-mail at service@joy-it.net or via telephone.

#### Information about packaging:

Please package your old appliance safe during transport. Should you not have a suitable packaging material or you do not want to use your own material, you can contact us and we will send you an appropriate package.

# CE

# **11. SUPPORT**

If any questions remain open or problems arise after your purchase, we are available by e-mail, telephone and with a ticket support system to answer these.

E-Mail: service@joy-it.net Ticket-System: http://support.joy-it.net Telephone: +49 (0)2845 98469 – 66 (10 - 17 oʻclock)

For further information visit our website: **www.joy-it.net** 

Published: 07.02.2020

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