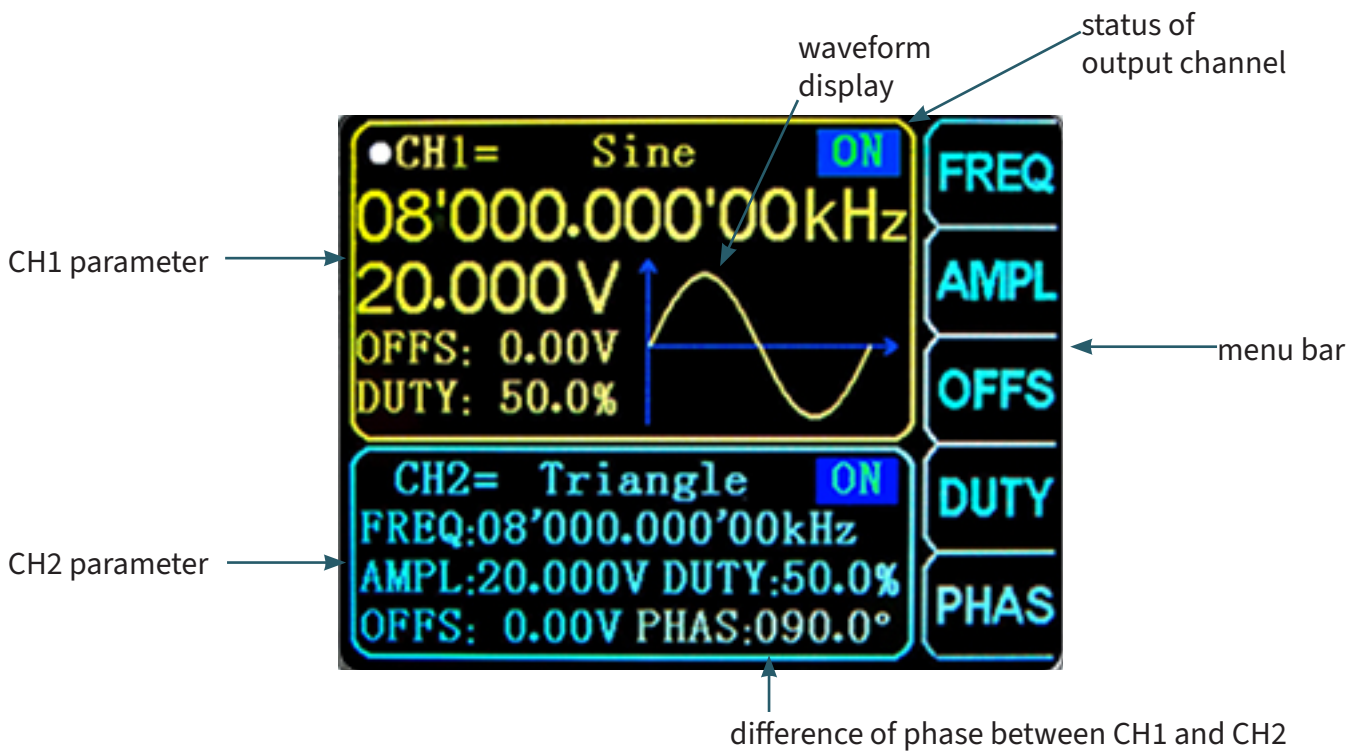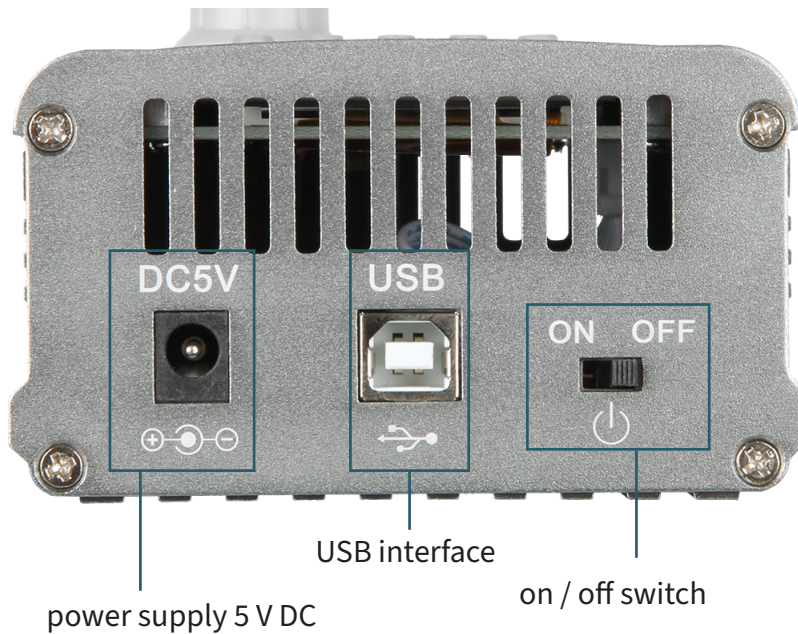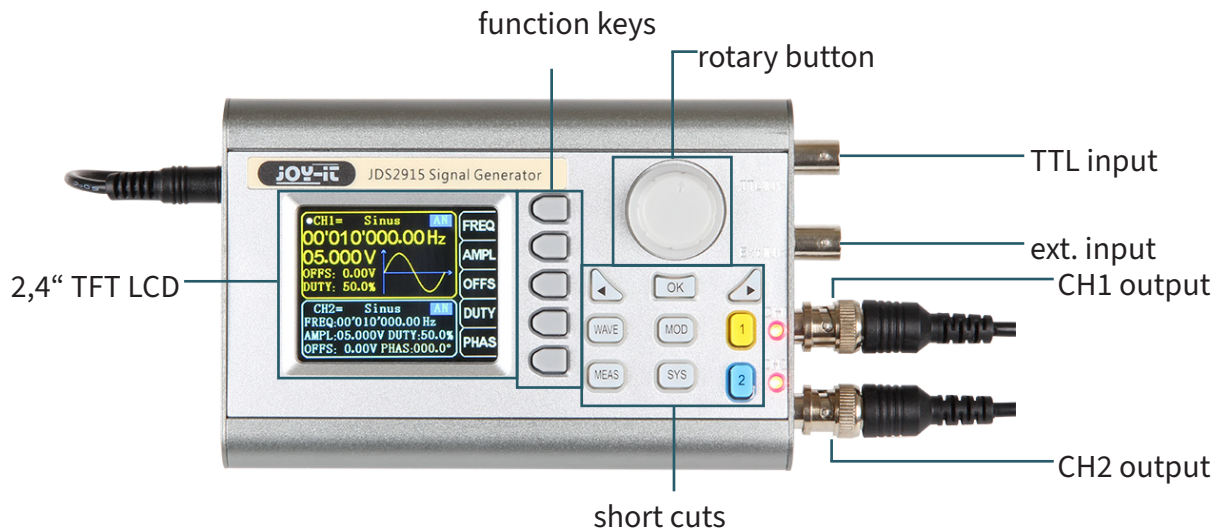# JDS29XX

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.

function keys

rotary button

TTL input

ext. input

CH1 output

2,4" TFT LCD

CH2 output

short cuts

DC5V

USB

ON   OFF

USB interface

on / off switch

power supply 5 V DC

waveform display

status of output channel

CH1 parameter

menu bar

CH2 parameter

difference of phase between CH1 and CH2

3. SHORTCUT-OVERVIEW

WAVE	configuration of wave form
MEAS	configuration of measuring mode
MOD	activation of the modulation mode
SYS	system settings
OK	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. By pressing and holding the button, the currently set parameters of the channels are saved and automatically set at the next start.

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.

Use the multifunctional button 1 (FREQ) to highlight the frequency parameter. Then use the arrow keys to move the cursor to the value which should be edited. Press the rotary button to edit the according value. Hold down the multifunctional button to change the unit (µHz, mHz, Hz, KHz, MHz).

To call up the set values again automatically at the next start, press and hold OK for approx. 1 second until you hear a beep sound.

5. MEASURING AND COUNTING FUNCTION

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 [II] can 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 configure 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 µs 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 to open the setup menu. Use the multifunctional buttons ▲ ▼ to navigate. The following settings can be made:
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

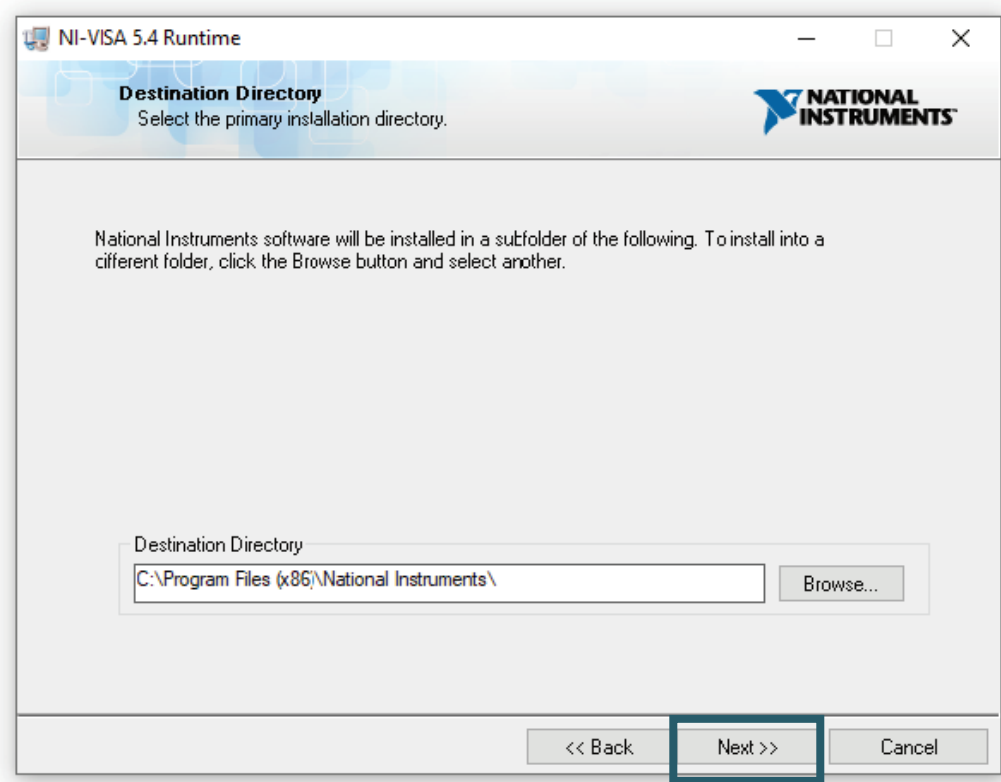You can download the latest version of the PC software on our Website.

Start the installationby opening the file **JDS6600.exe**.

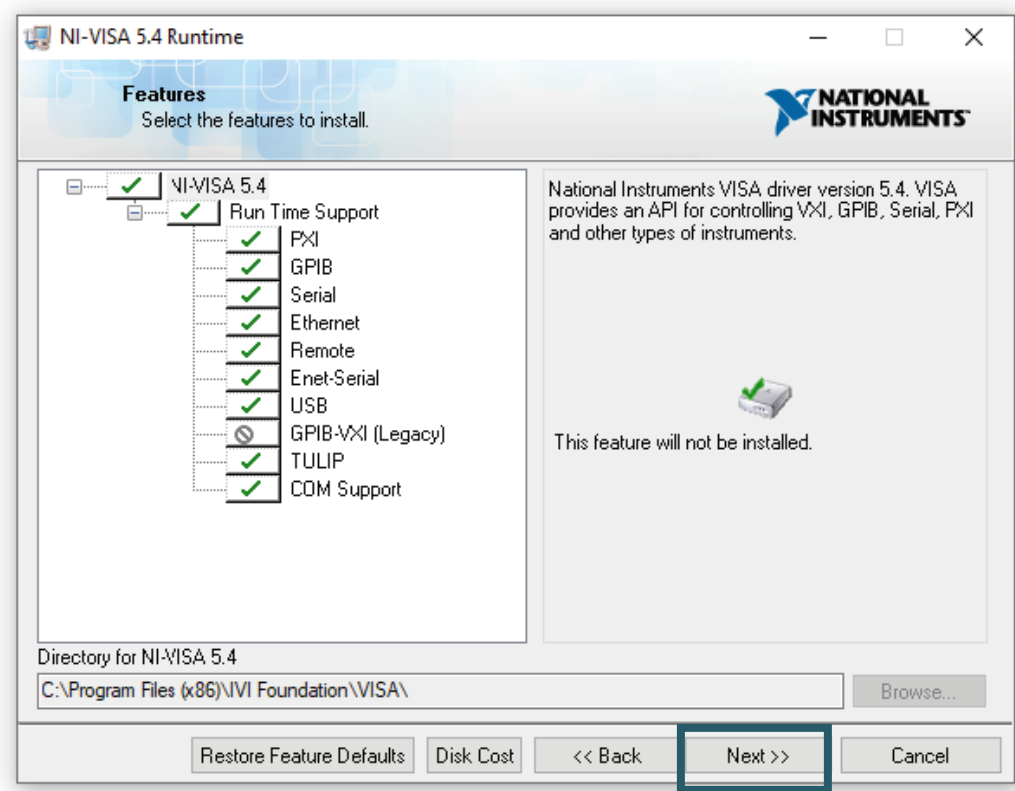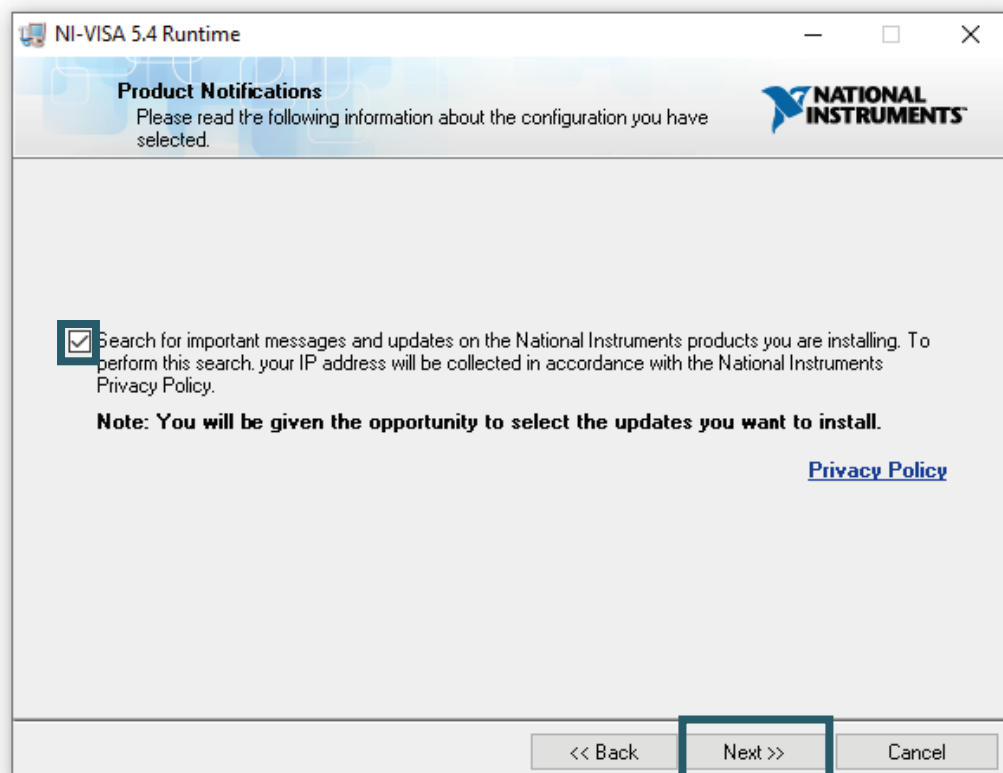Press **Next >>** in the now opening window.

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

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

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.

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.
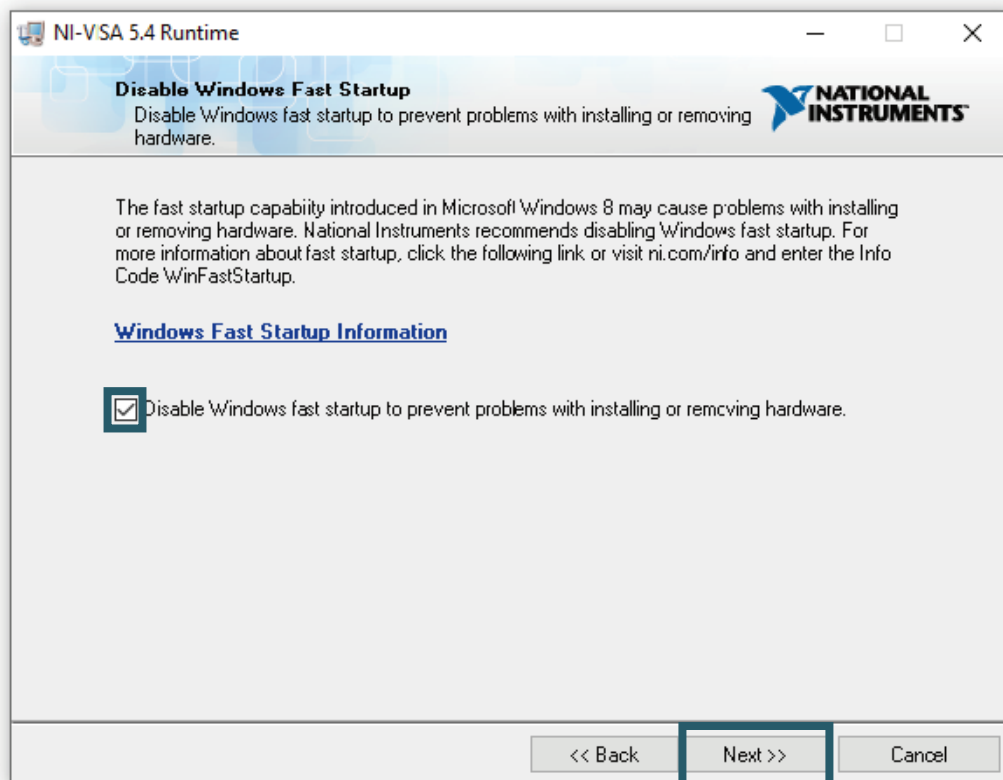

The installation program now performs the corresponding installations. After successful installation, you can exit the installer.

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).
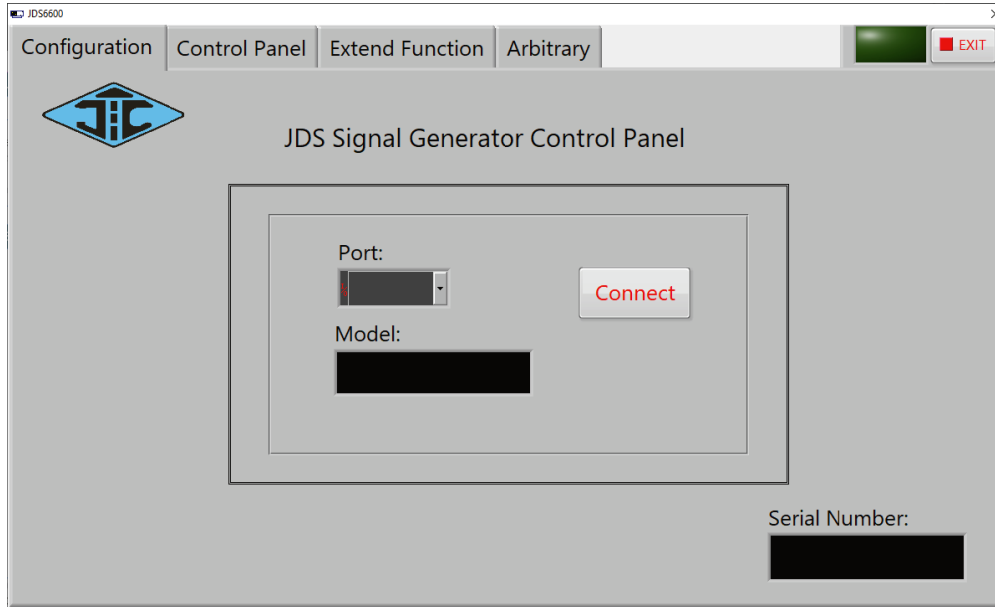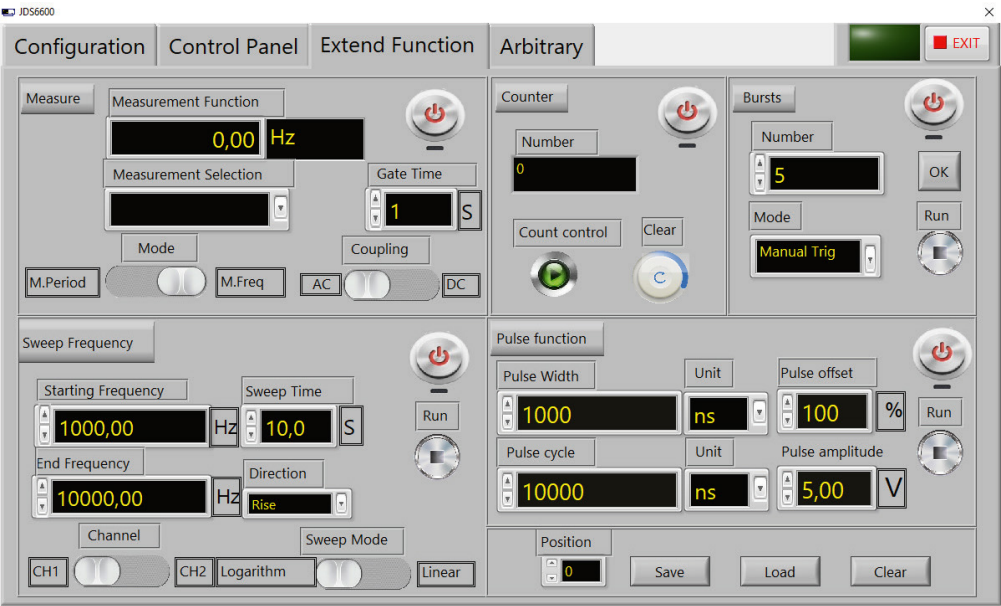

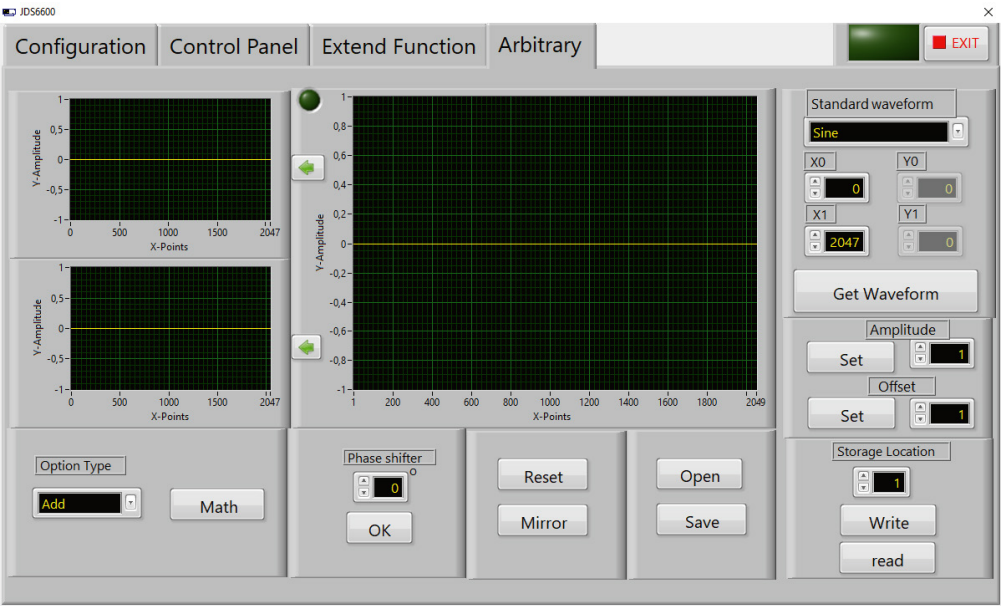Then establish the connection with **Connect**.
In the **Control Panel**, which you can reach via the tab at the top of the software, you can output the standard waveforms and function signals.
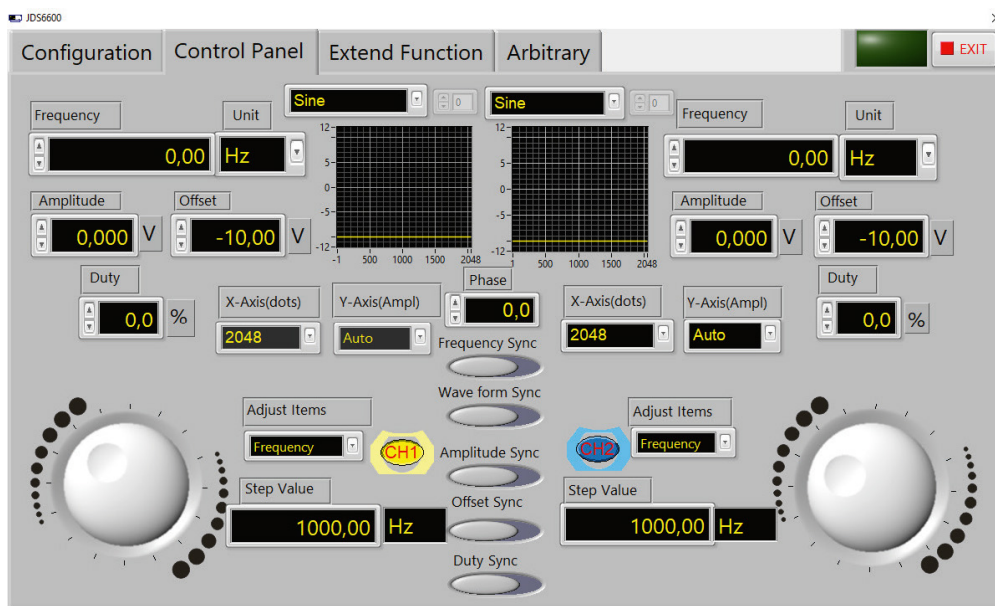
At **Extend Function** you will find the measuring, counting, burst, sweep and pulse functions.

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

10. OTHER INFORMATION

Our information and take-back obligations under the German Electrical and Electronic Equipment Act (ElektroG)

Symbol on electrical and electronic equipment:
 This crossed-out dustbin means that electrical and electronic equipment should not be disposed of with household waste. You must dispose of old appliances at a
Submit to the registration office.
Before handing in old batteries and accumulators that are not enclosed by the old appliance, you must separate them from the appliance.

Return options:
As an end user, when you purchase a new device, you can
(which essentially performs the same function as the New
free of charge for disposal.
Small appliances with no external dimensions larger than 25 cm can be disposed of in normal household containers, regardless of whether a new appliance is purchased
Quantities can be delivered.

Possibility of return at our company location during the opening hours:
SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

Possibility of return in your area:
We will send you a parcel stamp with which you can return the device to us free of charge. To do this, please send an e-mail to
service@joy-it.net or by telephone to us.

Packaging information:
Please pack your old appliance securely for transportation if you do not have suitable packaging material or do not wish to use your own, contact us, we will then arrange suitable packaging for you to come.

11. SUPPORT

We are also there for you after your purchase. If you still have any questions or problems arise, we are also available by e-mail, telephone and ticket support system.

E-Mail: service@joy-it.net
Ticket system: https://support.joy-it.net
Phone: +49 (0)2845 9360 - 50

For more information, please visit our website:
www.joy-it.net

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