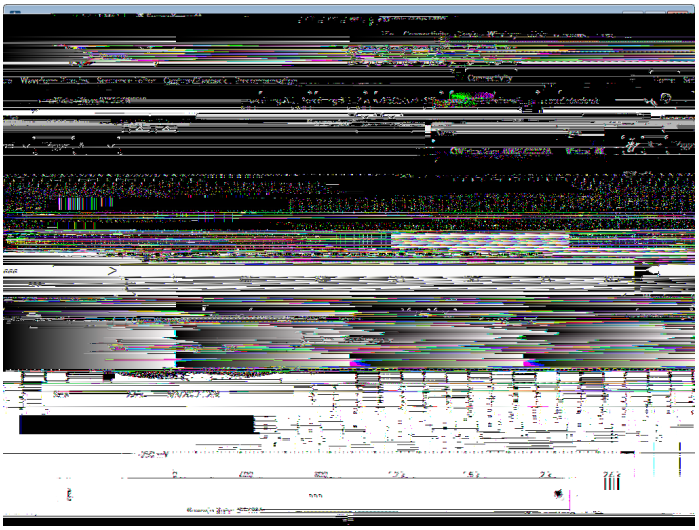
Waveform Creation and Instrument Control Environment for PC

SourceXpress® Datasheet



SourceXpress is a PC based software environment that enables Tektronix waveform creation plug-ins, simulates the native environment of a Tektronix AWG70000 or AWG5200 series Arbitrary Waveform Generator, and provides control of a connected generator. SourceXpress allows you to create signals anywhere without being tied to a signal generator. SourceXpress brings a uniform look and feel to waveform creation while enabling an ever growing library of waveform creation plug-ins.

Key features

- PC-based instrument control that simulates the AWG70000 or AWG5200 Series interface
- Free up instruments to create waveforms offline
- Use your Windows tablet or your powerful PC workstation
  - Windows 7 (64 bit), Windows 8 (64 bit), and Windows 10 (64 Bit) operating systems supported
- Single, Consistent UI: Customer only needs to learn one interface to control multiple instruments. This UI will be standard for future instruments as well. Customer have a single platform for instrument control and waveform generation for all their Tek sources.
- Multi-Instrument Control: Customers who have large racks of instruments or multi-instrument setups will have a single interface to control and feed all of their signal sources.
- Stay on the cutting edge of Tek: SourceXpress plug-ins provide quicker access to new signal generation capabilities, standards, and functionality.
- Work Seamlessly and Remotely with your Signal Generator: Develop offline waveforms with the same UI that is used on the AWG70000 and AWG5200 Series generators. Easily fine tune or change the waveform out of the lab and then apply those changes when the signal generator is available.

Virtual generators

You can create as many virtual instruments you like, each with different configurations. Use the Connectivity > Connect to Virtual Generator... menu. When connected to a virtual instrument, you can create all your waveforms or sequences, create setups specific to instrument types, all in the absence of an instrument. Then when an instrument is available, you can simply recall your saved files.

Connect to instruments

With SourceXpress installed on a networked PC, SourceXpress can remotely connect and control any AWG70000 or AWG5200 Series instrument on the network. The interface of the selected instrument is displayed in the SourceXpress application window, providing you access to all instrument controls, directly from SourceXpress.

Quick instrument search and connect

The connectivity tab provides a window for you to directly enter the computer name (hostname) or IP address of a networked instrument you wish to connect to. You can obtain the correct hostname, go to the target instrument, select Computer > Properties and note the computer name.

This method bypasses the search mechanism found in the Connectivity > Connect to Instrument... menu.

Selecting the active generator

From the Connectivity tab, you select which instrument you want to access, regardless if it's a virtual generator or a connected instrument. Making the generator active brings its display into view.

Creating a multi-channel generator

When working with AWG70000 Series generators, you can group up to four generators together (of the same model) to work in coordination with each other, forming a gang of generators. The channels of all generators are then displayed together on the Home screen of SourceXpress. This gives the appearance of a single generator with up to eight channels (four AWG70002 generators ganged together) with the ability to control all eight channels from a single screen.