LabVIEW Driver for Conditioning Amplifiers Type 269x-Nexus Release 1.0

Introduction

This release includes near complete support of the Amplifier and Transducer functions. The release includes the following components:

- A LabVIEW library of driver functions to set and get amplifier parameters
- A LabVIEW library of examples showing how to use the driver functions

System requirements and installation

To run the LabVIEW driver functions you need to have:

- LabVIEW 6i (6.0) (or higher, tested on LabVIEW 2014 32 bit) including the 32 ActiveX component installed. This is tested on the 64 bit machines.
- NEXUS Setup & Control software, available at http://www.bksv.com/ServiceCalibration/Support/Downloads.aspx
  - When using version 2.0 of the NEXUS Setup & Control software, copy the BKNexusCommMgr.cfg file (default location C:\Program Files (x86)\Bruel and Kjaer\NEXUS and Type 2694 Control) to the same folder as the LabView.exe (default location C:\Program Files (x86)\National Instruments\LabVIEW 2014)

PLEASE NOTE: The example files and the NEXUS driver library will not work with LabVIEW 2014 64 bit version.

To **correctly install your 269x-Nexus driver toolkit** and to make use of all the function and example palettes:

- Close LabVIEW
- Unzip the downloaded 269x_Nexus_LabView6.zip file into your   ...LabVIEW **\instr.lib\ directory
- Launch LabVIEW.

The driver library

The driver library *269x-Nexus Driver.llb* includes a number of functions that are organized in different levels of hierarchy. High-level functions allow complete setup of any channel on any Nexus unit connected to any COM port. Figure 1 shows a simple diagram for the described hierarchy. (The figure is a screenshot of the diagram of the *All VIs.vi* that is included in the driver library). Figure 2 shows a screenshot of the VI- hierarchy window for the included example.
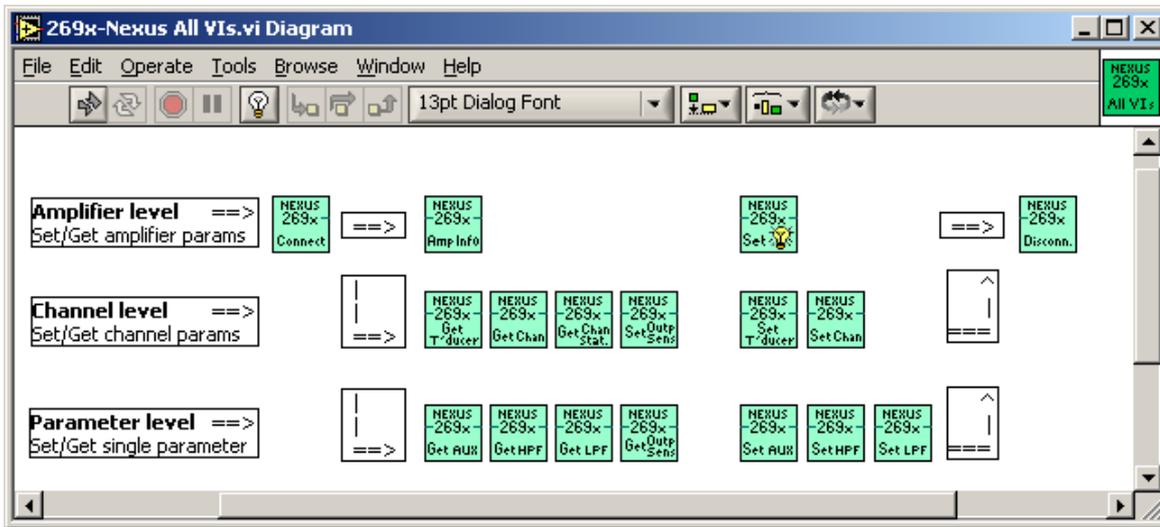
Figure 1: Diagram window of the All Vis.vi that is included in the driver library

The example library

The library *269x-Nexus Examples.llb* includes three examples. Two of them are identical in functionality but differ on the front panel design. The examples show how to control a single channel or all the channels on one Nexus amplifier that is part of a daisy chain on a COM port connection.
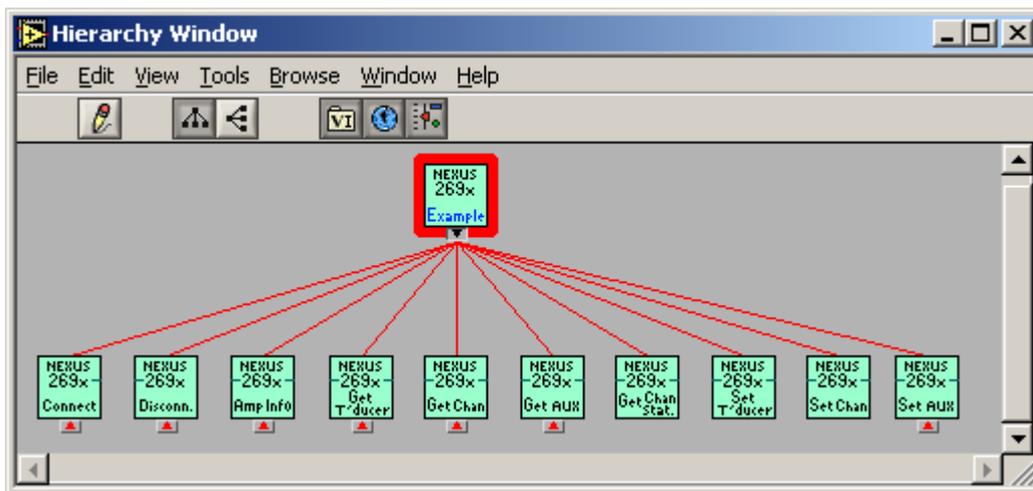

Figure 2: Hierarchy window for the main example VI