Getting Started with NI-DAQ™mx Base for Linux and Mac OS X Users

This guide describes how to install your device, and download and install your software.

Note Install the software before installing the device.

NI-DAQmx Base is a driver that controls your data acquisition device on Linux, Mac OS X, and Windows Mobile devices. NI-DAQmx Base consists of a set of LabVIEW VIs and a C programming interface, as well as device recognition and simple datalogging tools. NI-DAQmx Base is a subset of NI-DAQmx. If you are familiar with NI-DAQmx, you should be able to use NI-DAQmx Base.

1. Install Software

If you do not have an NI-DAQmx Base CD, you can download NI-DAQmx Base for Linux and Mac OS X by visiting `ni.com/info` and entering `rddqld`. A separate download is available for each operating system. Refer to the `install.txt` file on the download page for install instructions.

MAC OS X

Installing from ni.com

To install NI-DAQmx Base from `ni.com`, complete the following steps:

1. Download the NI-DAQmx Base `.dmg` file.
2. Double-click the NI-DAQmx Base `.dmg` file to mount the disk image.
3. Double-click the NI-DAQmx Base `.mpkg` file to run the NI-DAQmx Base installer.

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Installing from the CD

To install NI-DAQmx from the CD, complete the following steps:

1. Insert the CD.
2. Double-click the NI-DAQmx Base `.mpkg` file to run the NI-DAQmx Base installer.

Linux

Installing from ni.com

To install NI-DAQmx Base from `ni.com`, complete the following steps:

1. Copy the NI-DAQmx Base `.iso` file to your hard drive.
2. Either mount the ISO image or burn the image to a CD and mount the CD.
3. To launch the NI-DAQmx Base installer, run the INSTALL script as root from the mount location.

Installing from the CD

To install NI-DAQmx from the CD, complete the following steps:

1. Insert the CD.
2. To launch the NI-DAQmx Base installer, run the INSTALL script as root from the mount location.

2. Install Device

Refer to the device documentation for information about how to install the device.

3. Confirm That Your Device Is Recognized

NI-DAQmx Base includes a List Devices utility (`lsdaq`), which displays the devices installed on your computer. The utility is accessible from the following locations:

- **Mac OS X**
  - `/Applications/National Instruments/NI-DAQmx Base/lsdaq.app`
- **Linux**
  - `/usr/local/bin/lsdaq`

4. (Optional) Launch Ready-to-Run Datalogging Software

NI-DAQmx Base includes ready-to-run datalogging software, which lets you begin making measurements without creating a program first. The applications are accessible from the following locations:

- **Mac OS X**
    - `/Applications/National Instruments/`
      `NI-DAQmx Base/nidatalogger.app`
- **Linux**
    - `/usr/local/bin/nidatalogger`

5. Run Programming Examples

NI-DAQmx Base includes examples for each measurement type that demonstrate appropriate functionality. Examples for LabVIEW are located in `<LabVIEW>/examples/daqmxbase`. They are not included in the NI Example Finder. C Examples are installed by default to:

- **Mac OS X**
    - `/Applications/National Instruments/`
      `NI-DAQmx Base/examples`
- **Linux**
    - `/usr/local/natinst/nidaqmxbase/examples`

The make files create the links to the necessary libraries. Make sure you run the List Devices utility (`lsdaq`) before running the examples. Acquire N Scans is an example that ships with NI-DAQmx Base. From a terminal window, use the following to compile and run the Acquire N Scans example:

- **Mac OS X**

```
>> cd /Applications/National\ Instruments/NI-DAQmx\ Base/examples/ai
>> make
>> ./acquireNScans
```

- **Linux**

```
>> cd /usr/local/natinst/nidaqmxbase/examples/ai
>> make
>> ./acquireNScans
```

Documentation

Documentation is located in the following directories:

- **Mac OS X**
    - /Applications/National Instruments/
      NI-DAQmx Base/documentation

- **Linux**
    - /usr/local/natinst/nidaqmxbase/documentation

Documentation includes the *NI-DAQmx Base C Function Reference*, the hardware references, supporting PDFs, and the NI-DAQmx Base readme file. LabVIEW help files are accessible from the *LabVIEW Help* menu.

For more information, refer to the NI-DAQmx Base readme file.