PICKERING INTERFACES' PCI / PXI GETTING STARTED GUIDE

	Switching						Instrument
Direct I/O for PXI and LXI	**Direct I/O**	**VISA**	**LabVIEW RT**	**IVI**	**IVI RT**	**.NET**	**non VISA, VISA, IVI**
pilpxi (included in pipx40) ⒸC	–	VISA	VISA (no Soft Front Panels available for LVRT)	VISA+ICP (IVI compliance package)	VISA+ICP (IVI compliance package)	pilpxi (Included in pipx40) ⒸC	Depends on the above selection, for VISA > VISA for IVI > VISA+ICP
piplx * (Client-Bridge) ⒶA	pilpxi (Included in pipx40) ⒸC	pipx40 ⒸC	pipx40 ⒸC	pi40iv (VISA) ⒷB	pi40iv (VISA) ⒷB	ⒺE	ⒹD

Step 1: Select your module type.

Step 2: Select the required driver

Step 3: Check that the pre-requisites for the driver are already installed.

Step 4: Install the required driver by following the letter cross-reference.

* piplx includes picmlx and adds pipslx (LXI Power Sequencer) driver.

Ⓐ
Installer: www.pickeringtest.info/downloads/drivers/Sys60 ClientBridge
DVD: \downloads\Drivers_LXI\ClientBridge v[Version].exe
Default Install Location - 32-bit OS: C:\Program Files\Pickering Interfaces Ltd\ClientBridge
Default Install Location - 64-bit OS: C:\Program Files (x86)\Pickering Interfaces Ltd\ClientBridge
LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Piplx\piplx.llb
LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Piplx\piplx.llb

Note: Direct I/O Driver – piplx / picmlx The PIPLX library is a driver for Pickering LXI devices, including LXI modular. It is based on the Pickering PXI kernel driver pilpxi but with minor changes to cope with the access of an LXI chassis. An additional library, the communications module picmlx provides the extra functionality required to manage the LXI resource. This module provides mechanisms for locating and opening a session onto a remote LXI device. This library may also be used to control Pickering 40 Series Switch cards in a local PXI chassis, calling the PXI driver when a device on a local PXI address is opened.

Ⓑ
Installer: www.pickeringtest.info/downloads/drivers/IVI/ IVI-C Driver (use latest)
DVD: \downloads\Drivers_IVI\Pickering Interfaces IVI Switch Driver - pi40iv_4.xx.xx.exe
Default Install Location - 32-bit OS: C:\Program Files\IVI Foundation\IVI\Drivers\pi40iv
Default Install Location - 64-bit OS: C:\Program Files (x86)\IVI Foundation\IVI\Drivers\pi40iv
LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Pi40iv\pi40iv.llb
LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Pi40iv\pi40iv.llb

Note: IVI Driver - pi40iv The pi40iv IVI (Interchangeable Virtual Instrument) driver supports all Pickering Interfaces PXI switch cards that are consistent with the IVI switch class model. Based on VISA it integrates well with LabWindows/CVI and LabVIEW, and is fully compatible with NI Switch Executive.

Ⓒ
Installer: www.pickeringtest.info/downloads/drivers/PXI%20Drivers/
DVD: \downloads\Drivers_PXI\PXI_Installer\
Default Install Location - 32-bit OS: C:\Program Files\Pickering Interfaces Ltd\ (Pipx40 or Pilpxi)
Default Install Location - 64-bit OS: C:\Program Files (x86)\Pickering Interfaces Ltd\ (Pipx40 or Pilpxi)
VISA LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Pipx40\pipx40.llb
VISA LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Pipx40\pipx40.llb
Direct I/O LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Pilpxi\pilpxi.llb
Direct I/O LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Pilpxi\pilpxi.llb

Note: VISA Driver - pipx40 The pipx40 driver conforms to the VISA (Virtual Instrument Software Architecture) standard for programmable instrumentation. Instrument control environments such as LabVIEW and LabWindows/CVI are based on VISA, making this driver the natural choice when using them if IVI compliance is not required.

Note: Direct I/O Driver - pilpxi The pilpxi driver accesses cards directly, without using the VISA interface model, while offering similar overall functionality to pipx40. Although it can be used in VISA-based environments, doing so sacrifices integration with the many useful VISA configuration and debug tools; hence this driver has only minimal support for LabVIEW and LabWindows/CVI. It is more commonly used in general-purpose Windows environments such as Visual C++ and Visual Basic. There is generally little difference in operating speed between the VISA and Direct I/O drivers.

Ⓓ
Installer: www.pickeringtest.info/downloads/drivers/Sys41/ various instruments
DVD: \downloads\Instruments
Default Install Location: Instrument dependent
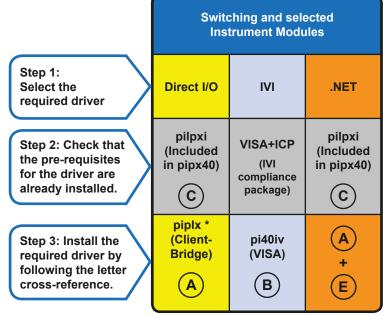**LabVIEW LLB:** C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\[driver_name]

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Installer: www.pickeringtest.info/downloads/drivers .NET
DVD: \downloads\Drivers_LXI\ClientBridge.NET v[Version].exe

Note: .NET Particularly suitable for .NET programming environments.

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See the Pickering Wiki: https://www.pickeringtest.com/kb/software-topics for more information on driver installation.
Programming examples available at: www.pickeringtest.info/downloads/example_software/

PICKERING INTERFACES' LXI GETTING STARTED GUIDE

	Switching and selected Instrument Modules		
Step 1: Select the required driver	**Direct I/O**	**IVI**	**.NET**
Step 2: Check that the pre-requisites for the driver are already installed.	**pilpxi** (Included in pipx40) Ⓒ	**VISA+ICP** (IVI compliance package)	**pilpxi** (Included in pipx40) Ⓒ
Step 3: Install the required driver by following the letter cross-reference.	**piplx *** (Client-Bridge) Ⓐ	**pi40iv** (VISA) Ⓑ	Ⓐ + Ⓔ

* piplx includes picmlx and adds pipslx (LXI Power Sequencer) driver.

Ⓐ

Installer: www.pickeringtest.info/downloads/drivers/Sys60 ClientBridge
DVD: \downloads\Drivers_LXI\ClientBridge v[Version].exe
Default Install Location - 32-bit OS: C:\Program Files\Pickering Interfaces Ltd\ClientBridge
Default Install Location - 64-bit OS: C:\Program Files (x86)\Pickering Interfaces Ltd\ClientBridge
LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Piplx\piplx.llb
LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Piplx\piplx.llb

Note: <u>Direct I/O Driver – piplx / picmlx</u> The PIPLX library is a driver for Pickering LXI devices, including LXI modular. It is based on the Pickering PXI kernel driver pilpxi but with minor changes to cope with the access of an LXI chassis. An additional library, the communications module picmlx provides the extra functionality required to manage the LXI resource. This module provides mechanisms for locating and opening a session onto a remote LXI device. This library may also be used to control Pickering 40 Series Switch cards in a local PXI chassis, calling the PXI driver when a device on a local PXI address is opened.

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Installer: www.pickeringtest.info/downloads/drivers/IVI/ IVI-C Driver (use latest)
DVD: \downloads\Drivers_IVI\Pickering Interfaces IVI Switch Driver - pi40iv_4.xx.xx.exe
Default Install Location - 32-bit OS: C:\Program Files\IVI Foundation\IVI\Drivers\pi40iv
Default Install Location - 64-bit OS: C:\Program Files (x86)\IVI Foundation\IVI\Drivers\pi40iv
LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Pi40iv\pi40iv.llb
LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Pi40iv\pi40iv.llb

Note: <u>IVI Driver - pi40iv</u> The pi40iv IVI (Interchangeable Virtual Instrument) driver supports all Pickering Interfaces PXI switch cards that are consistent with the IVI switch class model. Based on VISA it integrates well with LabWindows/CVI and LabVIEW, and is fully compatible with NI Switch Executive.

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Installer: www.pickeringtest.info/downloads/drivers/PXI%20Drivers/
DVD: \downloads\Drivers_PXI\PXI_Installer\
Default Install Location - 32-bit OS: C:\Program Files\Pickering Interfaces Ltd\Pilpxi
Default Install Location - 64-bit OS: C:\Program Files (x86)\Pickering Interfaces Ltd\Pilpxi
LabVIEW LLB - 32-bit OS: C:\Program Files\National Instruments\LabVIEW [Version] \instr.lib\Pilpxi\pilpxi.llb
LabVIEW LLB - 64-bit OS: C:\Program Files (x86)\National Instruments\LabVIEW [Version] \instr.lib\Pilpxi\pilpxi.llb

Note: <u>Direct I/O Driver - pilpxi</u> The pilpxi driver accesses cards directly, without using the VISA interface model, while offering similar overall functionality to pipx40. Although it can be used in VISA-based environments, doing so sacrifices integration with the many useful VISA configuration and debug tools; hence this driver has only minimal support for LabVIEW and LabWindows/CVI. It is more commonly used in general-purpose Windows environments such as Visual C++ and Visual Basic. There is generally little difference in operating speed between the VISA and Direct I/O drivers.

Ⓔ

Installer: www.pickeringtest.info/downloads/drivers .NET
DVD: \downloads\Drivers_LXI\ClientBridge.NET v[Version].exe

Note: <u>.NET</u> Particularly suitable for .NET programming environments.

See the Pickering Wiki: https://www.pickeringtest.com/kb/software-topics for more information on driver installation.
Programming examples available at: www.pickeringtest.info/downloads/example_software/