

# Software Requirements



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# ICE

## 2009B – 2012A

Recommended PC configuration	
Processor	Intel®: Core™ 2 Duo, Core™ i3 or better AMD: Athlon™ X2, Phenom™ or better
OS	Windows® XP SP3, Windows Vista® or Windows® 7 (x86 or x64 version) <sup>1</sup>
Display	1280 x 1024 or higher <sup>2</sup>
Minimal PC configuration	
Processor	Intel® Pentium™ 4 or AMD Athlon™ XP
OS	Windows® XP SP2 (x86)
Display	1024 x 768
Installed software	
.NET Framework	Microsoft .NET Framework 2.0 SP2 <sup>4</sup>
Visual C++ Runtime	Microsoft Visual C++ 2008 Runtime or higher <sup>5</sup>
VISA I/O Library <sup>3</sup>	NI-VISA Run-Time (or Full) 4.3 or higher or Agilent IO Libraries Suite 14.2 or higher or other VISA compliant library <sup>6</sup>
External equipments control	
	IEC/IEEE-bus controller interface (IEEE-488) USB Ethernet

1 Not supported for 2009B: Windows Vista, Windows 7 and x64 (64-bits).

2 Restriction for 2009B – 2010B: Only Windows DPI setting of 96 supported.

3 You have to make sure to check the licensing agreement of the VISA distribution before installation. Typically you need to own hardware (e.g. GPIB interface card) or specific software (e.g. ADE tool) from the manufacturer for some versions, in order to have a valid license to install it on your PC.

4 Already pre-installed on Windows Vista or Windows 7. The ICE software installer will automatically install this in case it is missing otherwise.

5 Visual C++ Runtime 2010 requires Windows® XP SP3, Windows Vista® SP2 or Windows® 7

6 VISA Library needs to have VISA COM support.

# ZVxPlus

## 2009B - 2012A

Instrument Firmware	
Recommended	2.90 or later
Minimal	2.90

# PNAPlus

## 2010A - 2012A

Instrument Firmware	
Recommended	PNA Code Version A.08.55 or later
Minimal	PNA Code Version 7.2

# Tuners

## 2010A - 2012A

Focus Microwaves  iTuner (CCMT, CCMT-2C, PMT, PMT-TC, ...)  MPT (MPT, MPT-TC, MPT-TCW, MPTLite, ...)  LPExplorer Driven	  Calibration: Focus CalEx Control: Focus iTuner ActiveX  Calibration: Focus CalEx Control: Focus MPT ActiveX  Deembedding: NMDG LPEXSync library
Maury Microwave  MT986A, MT986B, MT986C, MT1020A, MT1020B, MT1020C, and all Maury automated tuners	  Calibration: ATSV5 with MT993N06 Option Control: MT993V04 Option (v 1.8.0.1 or later) Interpolation: MT993V01 Interpolation library

# MT4463

## 2009B - 2012A

Spectrum Driver	Spectrum DLL MI.40xx 3.13.00 <sup>1</sup>
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<sup>1</sup> For more recent driver versions or for M2i compatibility, please contact NMDG support.

# Remote Connection

## 2009B - 2012A

Recommended	Application capable of calling .NET 2.0 assembly: <ul style="list-style-type: none"><li>- LabVIEW™ (7 or higher)</li><li>- Wolfram Mathematica® (5.2 or higher)</li><li>- MATLAB® (R2009A or higher)</li><li>- ...</li></ul>
Minimal	Application capable of calling C/C++ library <sup>1</sup>

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<sup>1</sup> An interop library is needed which bridges unmanaged C/C++ to .NET. This library needs to be developed by the end client itself, to cover the needed API. An example is bundled with the ICE installation (2011A or higher), to demonstrate the basic principle.



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# Printing History

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## Change Log

Version 1.0, 10 May 2011 - Initial version.

Version 1.1, 25 August 2011 – Adding Visual C++ Runtime

Version 2.0, 19 March 2012 – ICE2012A Update